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ABSTRACT

This bulletin examines the labor market experience of youth in the United States and eight other industrial countries from the early 1960s to the late 1970s. The analysis focuses upon unemployment, the most visible and measurable form of labor underutilization. The report highlights the size of the youth unemployment problem and discusses some of the underlying reasons for the large international differences in youth unemployment. To facilitate international comparisons, the data have been adjusted to United States concepts. Subjects covered include trends in labor supply, demand factors, the student labor force, apprenticeship and format training, guidance and counseling, youth minimum wage, and minority group unemployment. Countries studied in the report, in addition to the United States, are Canada, Australia, Japan, France, Germany, Great Britain, Italy, and Sweden. Presented in a brief conclusion are comparative differences among the countries and reasons accounting for them. (KC)

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Youth Unemployment: An International Perspective

U.S. Department of Labor
Raymond J. Donovan, Secretary

Bureau of Labor Statistics
Janet L. Norwood, Commissioner
September 1981

Bulletin 2098

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Preface

This bulletin examines the labor market experience of youth in the United States and eight other industrial countries from the early 1960's to the late 1970's. The analysis focuses upon unemployment, the most visible and measurable form of labor underutilization. The report highlights the size of the youth unemployment problem and discusses some of the underlying reasons for the large international differences in youth unemployment. To facilitate international comparisons, the data have been adjusted to U.S. concepts.

The bulletin was prepared in the Bureau's Office of Productivity and Technology by Constance Sorrentino under the direction of Arthur Neef, Chief, Division of Foreign Labor Statistics and Trade. Joyanna Moy assisted in the research and analysis.

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Chapter 1. Introduction

The 1974–75 recession and subsequent slow recovery have been accompanied by very high levels of unemployment for young people in the industrial nations. Many countries which had low youth unemployment rates and low ratios of youth to adult unemployment during the 1960's have encountered serious youth unemployment problems since the mid-1970's.[1] By 1979, persons under 25 years of age in six of nine countries studied experienced unemployment rates of about 12 percent or higher (chart 1). In contrast, jobless rates for adults ranged from 2 to 6 percent in the six countries. Even in the three countries with still relatively low youth unemployment (Germany, Sweden, Japan), recent teenage jobless rates were 2 to 5 times the adult levels.

Several factors help to explain the international disparities in youth unemployment. Characteristics often associated with low youth unemployment include a declining trend in the youth labor force, little labor force activity by students, wide use of apprenticeship training, and relatively less emphasis on open career options and job mobility. For the countries with high youth unemployment, particularly the United States and Canada, certain common factors can also be singled out: Rapid increases in the youth labor force, a sizable student labor force, and an emphasis on general education and extended schooling rather than on the structuring of the early work years by such devices as apprenticeship.

This bulletin examines these disparities in detail. However, some important qualifications must be expressed regarding the measurement of youth unemployment and the comparability of the data.

Measurement of youth unemployment

Some of the current problems involved in measuring and interpreting youth unemployment in the United States were addressed at the February 1978 Conference on Employment Statistics and Youth sponsored by the U.S. Department of Labor. The conference report points out that the U.S. statistical system was not developed for use in understanding and measuring youth employment problems. Labor force concepts were largely derived from U.S. experience during the Great Depression, when the primary issue was joblessness among adult breadwinners.[2]

The meaning of employment, unemployment, and labor force status becomes somewhat clouded when applied to young people. Such persons often have more marginal and fluctuating attachments to the world of work than their older counterparts. For youth even more than for adults, the point-in-time measures of labor force status can mask an enormous flux as young people move into and out of jobs and the labor force. In all countries studied, there are substantial flows of students into the labor force during school vacations and holidays. In a few countries, there is also significant part-time labor force activity during the school term.

Questions have arisen both in the United States and abroad regarding the statistical treatment of part-time and part-year workers, many of whom are young people. A frequent criticism of the labor force as presently defined is that the measure gives equal weight to the Saturday night babysitter, the after-school lawnmower, and the full-time worker. It also lumps together all the unemployed; an individual is counted as unemployed if seeking paid employment of any duration—even of 1 hour a week.[3]

Further, the unemployment rate does not capture the full range of labor market difficulties experienced by young people. A more comprehensive analysis would include data, presently sketchy or lacking in most countries, on involuntary part-time work, discouraged workers, skill mismatches, and other forms of underutilization. Indications are that young people have sustained a heavy impact in many of these areas. For instance, both the Swedish and American labor force surveys show a large number of discouraged workers who are teenagers or young adults. These are persons who indicate that they would be seeking work if they believed

[1] For this study, the terms "youth" and "young people" refer to the broad category of persons under 25 years of age. This group is divided between "young adults"—the 20- to 24-year-old age group—and "teenagers"—those under 20 years of age. (The lower age limit for teenagers varies from 14 to 16 among the countries studied. See appendix for explanation.) "Adults" describes persons 25 years old and over.

[2] *Conference Report on Youth Unemployment: Its Measurement and Meaning* (Washington, Government Printing Office, 1978), pp. 1–2.

[3] The U.S. National Commission on Employment and Unemployment Statistics recently reviewed this issue and decided against recommending any changes in the current practice. The Commission felt that any change would represent a fundamental departure from the criterion which underlies the employment concept, i.e., work for pay or profit. See National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (Washington, Government Printing Office, 1979), p. 51.

they could find a job. American youth under 25 accounted for close to 30 percent of all discouraged workers in 1977–79; in Sweden, the proportion was 24 percent. German estimates of the "silent reserve" or pool of discouraged workers include a significant number of young people. Reportedly, many German girls age 15 to 17 who cannot find work simply decide to stay at home and help in the household.[4]

In addition, there is evidence in several countries that a considerable number of would-be school leavers have postponed their entry into the labor market in recent years.[5] Their extra schooling is a thinly disguised form of unemployment; these young people would prefer to be in the labor market. Finally, unemployment rates do not measure the recession-induced homeward flow of foreign workers from such countries as France and Germany; a large proportion of migrants are in the younger age groups.

Thus, it should be recognized that the statistics presented here have their limitations in that they measure only unemployment. Other elements of labor underutilization are not examined. Furthermore, the statistics do not distinguish between the different situations of young people. Youth who combine work and school are treated the same as young persons in the full-time labor force.

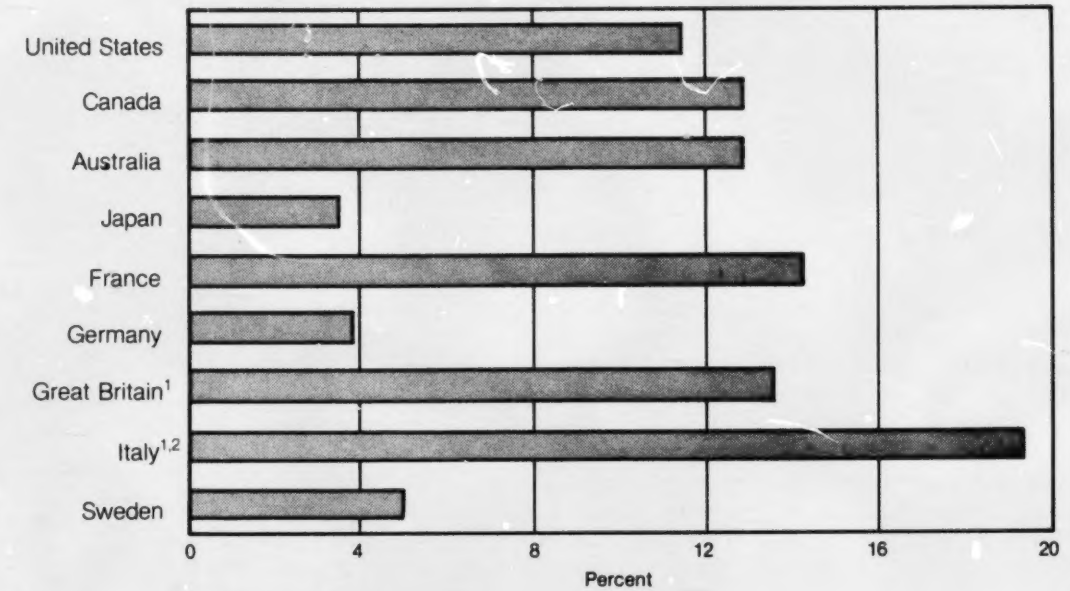
Adjustment to U.S. concepts

Labor force survey data have been adjusted to conform as closely as possible to the U.S. definition of the unemployed—that is, persons not at work who have taken active steps within the prior 4-week period to find work and are currently available to begin work. Persons waiting to begin a job within 30 days and persons awaiting recall to jobs from which they are on layoff are also included in the unemployed. Such persons do not have to be actively seeking work. It was not possible, in all cases, to adjust the foreign data precisely to this definition of unemployment—on some

[4] Margaret S. Gordon, *Youth Education and Unemployment Problems: An International Perspective* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1979), p. 55.

[5] Organization for Economic Cooperation and Development, *Australia: Transition from School to Work or Further Study*, OECD Reviews of National Policies for Education, (Paris, OECD, 1977), p. 47; International Labour Office, *Some Growing Employment Problems in Europe* (Geneva, ILO, 1974), p. 48; Klaus von Dohnanyi, *Education and Youth Employment in the Federal Republic of Germany* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1978), p. 38; and "Considering Employment: Unemployed (Part Two)," *Mainichi* (Japanese newspaper), Dec. 3, 1977, p. 7.

Chart 1 **Youth unemployment rates, 1979**



[1] 1978.
[2] Not adjusted to U.S. concepts.

points, data were simply not available for adjustment purposes.[6]

Some of the important issues relating to international comparability of unemployment statistics are discussed briefly below. The technical appendix to this bulletin discusses these and other issues in more detail.

Lower age limit. Youths in several countries typically leave school and enter the full-time work force at younger ages than in the United States. Therefore, it was decided not to strictly apply the U.S. lower age limit of 16 to the statistics of all countries. Instead, foreign lower age limits have been adjusted to the age at which compulsory schooling ends. This age varies from 14 to 16 in the countries studied.

Exclusions from labor force. Adjustments have also been made, where necessary, to exclude from the labor force career military personnel and unpaid family workers working less than 15 hours, for greater conformity with U.S. definitions. Where possible, those persons who are not currently available for work have been excluded from the unemployed.

Students. The American concern with employment and unemployment of in-school youth is unmatched elsewhere. No other country has so great a proportion of its students in the labor force or counts them so meticulously, even if they work a few hours a week. Most European countries and Japan do not probe very deeply into student labor force activity in their surveys; therefore, some student employment and unemployment are not reported. Yet, differences in the statistical treatment of students have only a small impact on data comparability since European and Japanese students do not tend to seek employment while in school.

Reference periods. Differences in reference periods are a more significant cause of noncomparability. Annual average data on unemployment by age were available for most countries. However, French and German data were generally available only for one month in the spring of each year. It is likely that the spring figures are understated in relation to the annual average. October survey data for France, for example, are available for the past few years and they indicate higher youth unemployment than the March surveys. Therefore, comparisons of French and German data with the annual average data for other countries should be made with caution.

Data for Great Britain. Labor force survey data for Great Britain are available from 1971 onward. These data, along with the 1961 population census, form the basis of the data adjusted to U.S. concepts. They show unemployment rates for persons under 25 years of age. However, they do not permit a breakdown for teenagers and young adults (ages 20 to 24). Therefore, British statistics on registrations at employment offices have also been used. The registration statistics generally understate unemployment because they do not include unregistered jobseekers. Young persons who are looking for work often do not register as unemployed because they are usually not eligible for unemployment benefits, having worked only intermittently or not at all. On the other hand, British registration statistics are available by age only for the month of July through 1975. July is a peak month for youth unemployment in Great Britain; annual average registered unemployment for youth would be somewhat lower. Since 1975, data by age for months other than July have been published by Great Britain, and these have been shown in chapter 2. They indicate youth unemployment rates several percentage points lower than the July figures.

Although not internationally comparable, the British registration data do give some idea of the relative levels of teenage and young adult unemployment in Great Britain. Also, in years of high unemployment such as the recent past, young persons have a higher propensity to register as unemployed, so that the recent British registration figures (i.e., post-1975) do not understate youth unemployment to any great extent. For example, 1978 registrations data by age for three time periods indicate a youth unemployment rate of about 12 percent. The British household survey data for 1978, adjusted to U.S. concepts, yield an annual average rate of about 14 percent for youth.

The adjusted British unemployment rates shown in this bulletin differ slightly from previously published estimates.[7] The revisions arise mainly from a new method of inflating the household survey results to universe levels. Further revisions may be made as additional information becomes available from surveys sponsored by the European Community. Therefore, the adjusted British figures should be regarded as preliminary estimates.

Data for Italy. The data for Italy present a special problem because the necessary statistics were not available to adjust them to U.S. concepts. Because Italy has had a severe and unique youth unemployment problem, Italy was included in this analysis. The unadjusted data should be viewed with caution, but they are roughly suggestive of the dimensions of Italian youth unemployment. Youth unemployment rates for Italy would probably be a few percentage points lower if it were possible to adjust them fully to a U.S. basis, but they would still be extremely high by international standards.

[6] The chief differences in the ways in which countries measure and define unemployment and the methods of adjusting foreign data to U.S. concepts are described in detail in *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, 1978). The bulletin also describes the methods of adjustment of data by age.

[7] *Ibid.*, chap. 3.

Chapter 2. International Comparisons of Youth Unemployment

In most industrial countries, unemployment rates for young people historically have been higher than those for their elders. However, the extent of unemployment for youth has varied widely, both among the countries and over time within countries. Relatively high levels have occurred in the United States and Canada throughout the post-World War II period. For most of the other countries, the problems of youth in the labor market are a much more recent phenomenon. In Germany and Japan, the recent increase in youth joblessness marks a significant departure from the past. A deteriorating job situation for young persons began in the mid- or late 1960's in Great Britain, France, and Sweden, and even earlier in Italy. Thus, although cyclical factors are largely responsible for the very high levels of youth unemployment from 1974 onward, the roots of the problem go back further than the most recent economic downturn.

Table 1 presents unemployment data by age group for selected years of the 1960–79 period. Except for Italy, the data have been adjusted so that they approximate U.S. concepts. British data are also shown on an unadjusted (registered unemployed) basis because these are much more current and detailed than the adjusted data. For recent years, at least, the British registrations data are fairly good indicators of youth unemployment.

Long-term trends

In the early 1960's, youth unemployment rates as well as overall jobless rates were low in Australia, Japan, France, Germany, Great Britain, and Sweden. For example, teenage unemployment rates ranged from 0.3 percent in Germany to 4 percent in France (chart 2). Young adults' rates varied less widely, from 0.4 percent in Germany to 2.7 percent in Great Britain (chart 3). The statistics for the United States, Canada, and Italy were in marked contrast: The North American countries had teenage unemployment rates in the 13 to 15 percent range, and Italy's teenage rate was over 9 percent. Italy's moderate overall unemployment rate masked a severe youth unemployment problem. Jobless rates for young adults were also relatively high in these three countries.

In the latter years of the 1960's, youth unemployment rates began to climb in France, Germany, and Great Britain and, to a much lesser degree, in Sweden and Australia. By 1970, French and German teenagers had much higher jobless rates than in the early 1960's, although the German rate was only 1.4 percent. Young adult rates in France had also climbed upward, but they remained very low in Germany. Data adjusted separately for teenagers and young adults were not available for Great Britain in the 1970's. Registrations data, however, indicate a sizable increase in unemployment for both groups. In all three countries, overall unemployment in 1970 was somewhat higher than in the early 1960's. In contrast, the United States and Canada actually had lower national jobless rates in 1970 than in 1960, but slightly higher teenage rates. Youth unemployment in North America remained much higher than in Western Europe, Australia, and Japan. Italian youth unemployment rose to a level close to that of the United States and Canada. Japan was the only country which did not record a rise in teenage unemployment between 1960 and 1970.

Unemployment rates for young adults did not necessarily follow the teenage pattern. In the United States and Canada, jobless rates for 20- to 24-year-olds declined between 1960 to 1970. In the other countries where teenage unemployment rose, the rates for young adults also rose, but only France and Italy had sharper increases for young adults than for teenagers.

The 1974–75 recession brought sharp increases in unemployment in all countries studied except Sweden, where a high level of employment was maintained through considerable expansion of such programs as labor market training and public works. Youth jobless rates in the other countries rose rapidly and by 1975 U.S. teenage unemployment was at a postwar peak of almost 20 percent, the highest rate among the nations studied. Italian and Canadian teenage rates were next highest, in the 15–17 percent range. Australian, French, and British teenagers had rates of unemployment above 10 percent for the first time in the postwar period. German teenagers reached a jobless high of 4.7 percent in 1975, two and one-half times the level in the previous year. Japanese teenage unemployment also moved up-

Table 1. Unemployment rates by age, adjusted to U.S. concepts, selected years, 1960–79

(Percent)

Country and date	All working ages	Under age 25			25 and over
		Total	Teenagers[1]	Age 20 to 24	
United States:					
1960	5.5	11.2	14.7	8.7	4.4
1970	4.9	11.0	15.2	8.2	3.3
1974	5.6	11.8	16.0	9.0	3.6
1975	8.5	16.1	19.9	13.6	6.0
1976	7.7	14.7	19.0	12.0	5.5
1977	7.0	13.6	17.7	10.9	4.9
1978	6.0	12.2	16.3	9.5	4.0
1979	5.8	11.7	16.1	9.0	3.9
Canada:					
1960	7.0	11.1	13.5	9.3	5.8
1970	5.7	10.0	13.9	7.5	4.2
1974	5.3	9.3	11.6	7.6	3.9
1975	6.9	12.0	14.9	9.9	5.0
1976	7.1	12.7	15.7	10.5	5.1
1977	8.1	14.4	17.5	12.2	5.8
1978	8.4	14.5	17.9	12.2	6.1
1979	7.5	13.0	16.1	10.8	5.4
Australia:[2]					
1964	1.4	2.7	3.7	1.6	.9
1967	1.9	3.0	3.6	2.5	1.5
1970	1.7	2.7	3.8	1.8	1.3
1974	2.7	4.9	6.6	3.6	1.9
1975	4.9	9.7	13.9	6.4	3.2
1976	4.8	10.0	14.4	6.6	2.9
1977	5.6	12.0	17.4	7.5	3.3
1978	6.3	12.6	17.3	8.8	3.9
1979	6.2	13.0	18.1	8.8	3.7
Japan:					
1960	1.7	2.1	2.2	2.0	1.5
1970	1.2	2.0	2.0	2.0	.9
1974	1.4	2.5	2.6	2.3	1.2
1975	1.9	3.1	3.7	2.9	1.6
1976	2.0	3.2	4.1	3.0	1.8
1977	2.0	3.7	4.8	3.5	1.8
1978	2.3	3.8	4.7	3.6	2.0
1979	2.1	3.6	4.9	3.3	1.9
France:[3]					
March 1963	1.4	2.8	4.0	1.8	1.1
March 1970	2.5	4.8	7.0	3.7	2.0
March 1974	2.8	6.2	9.8	4.8	2.1
April 1975	3.8	8.4	12.7	6.9	2.8
March 1976	4.5	10.8	17.0	8.6	3.3
March 1977	4.9	11.9	18.7	9.6	3.5
October 1977	5.1	13.1	21.8	9.1	3.3
March 1978	4.9	11.8	19.0	9.6	3.6
October 1978	6.1	15.3	25.8	10.8	4.0
March 1979	5.7	14.2	22.7	11.4	4.1
Germany:[4]					
April 1963	0.3	0.3	0.3	0.4	0.3
April 1970	.5	1.0	1.4	.6	.4
April 1974	1.2	1.8	1.9	1.7	1.1
May 1975	2.9	4.5	4.7	4.4	2.5
May 1976	3.1	4.9	5.1	4.7	2.6
April 1977	3.2	5.0	5.0	5.0	2.7
April 1978	3.0	4.5	4.6	4.4	2.6
April 1979	2.7	3.9	4.1	3.7	2.5
Great Britain:					
Adjusted data					
April 1961	1.9	2.4	2.1	2.7	1.7
1971	3.9	6.1	[5]	[5]	3.3
1974	3.1	5.7	[5]	[5]	2.5
1975	4.6	9.3	[5]	[5]	3.6
1976	6.0	12.7	[5]	[5]	4.5
1977	6.4	13.5	[5]	[5]	4.8
1978	6.3	13.7	[5]	[5]	4.6
Registered unemployed[6]					
July 1971	3.0	4.5	5.3	4.0	2.6
July 1974	2.3	3.8	4.5	3.3	2.0
July 1975	4.1	9.2	12.0	7.3	2.9
January 1976[7]	4.9	9.6	11.6	8.2	3.9
July 1976	5.5	13.0	20.1	8.0	3.8
January 1977	5.4	10.6	12.9	9.0	4.2
July 1977	6.0	14.7	23.2	8.9	4.0
January 1978	5.8	11.4	13.9	9.6	4.4
July 1978	5.8	13.9	22.1	8.2	4.0
October 1978	5.3	10.6	13.8	8.4	4.0
January 1979	5.3	10.1	11.9	8.9	4.2
April 1979	4.9	8.6	9.4	8.1	4.0
July 1979	5.3	12.3	19.1	7.6	3.7
Italy:					
Unadjusted[8]					
1964	2.8	7.3	9.1	5.4	1.5
1970	3.2	10.2	12.3	8.8	1.5
1974	2.9	11.2	14.3	9.1	1.2
1975	3.4	12.9	16.8	10.4	1.5
1976	3.7	14.6	19.2	11.7	1.6
1977[9]	4.6	17.7	22.9	14.3	1.9
1978[9]	5.0	19.4	25.2	15.8	2.0
Sweden:					
1962	1.5	2.7	3.3	2.0	1.2
1970	1.5	2.9	4.3	2.2	1.3
1974	2.0	4.5	6.8	3.2	1.5
1975	1.6	3.8	5.6	2.8	1.2
1976	1.6	3.8	5.5	2.8	1.2
1977	1.8	4.4	6.7	3.2	1.3
1978	2.2	5.6	8.2	4.3	1.6
1979	2.1	5.1	7.5	3.8	1.5

[1]16- to 19-year-olds in United States, France, Great Britain (1974 onward), and Sweden; 15- to 19-year-olds in Canada, Australia, Japan, Germany, and Great Britain (prior to 1974); and 14- to 19-year-olds in Italy.

[2]There is a discontinuity between the 1964 figures and those for later years and between the 1977 figures and those for later years. The impact on data continuity is small.

[3]French unemployment rates for March or April are usually slightly below the annual average; October figures are generally slightly above the annual average. Unemployment rates for 1963 are understated in relation to later data.

[4]German unemployment rates for April are usually slightly lower than the annual average.

[5]Not available.

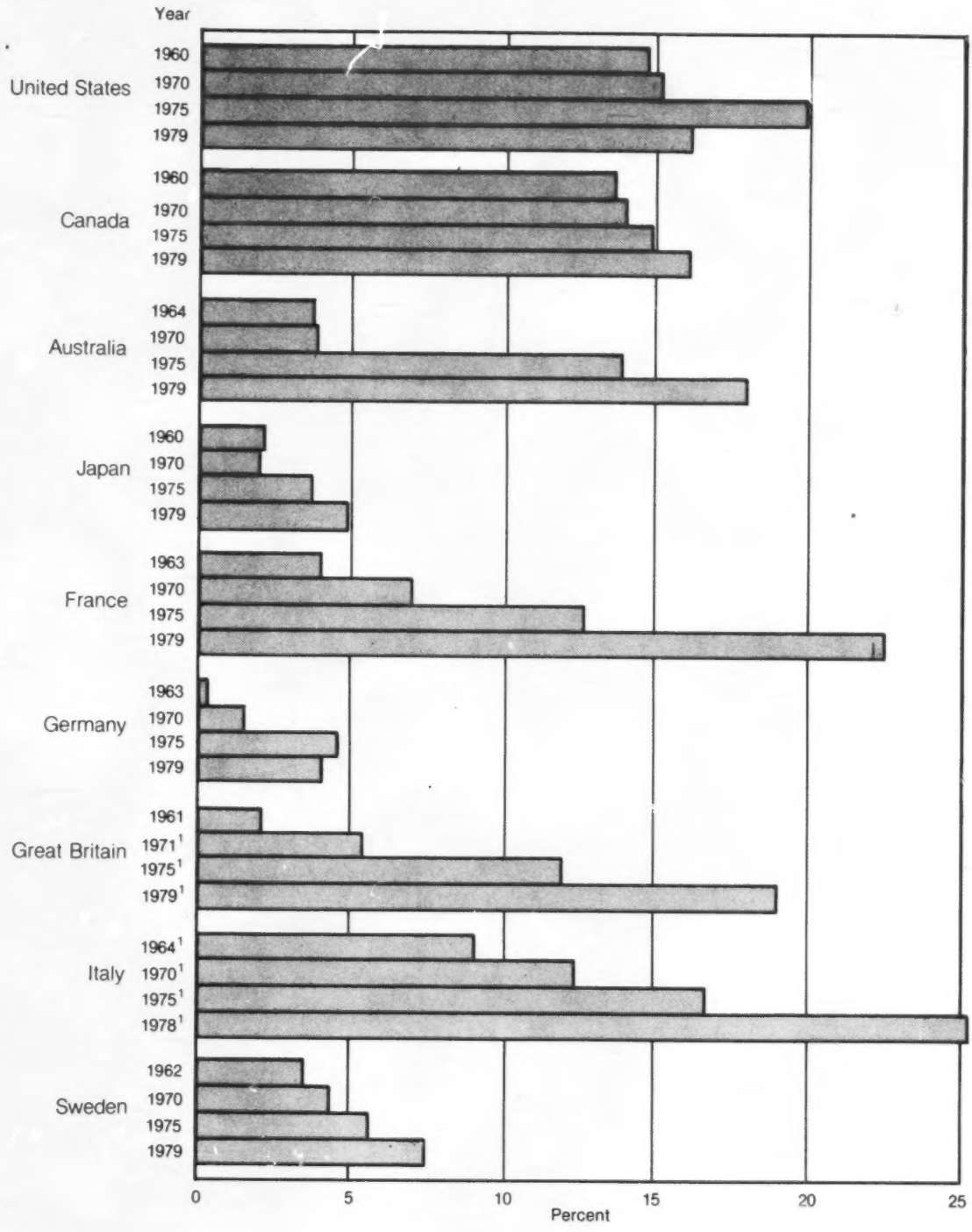
[6]Statistics on the registered unemployed are shown because data adjusted to U.S. concepts for 1979 onward are not available. Unemployment rates based on the registered unemployed were calculated using the civilian labor force as the denominator (official British figures use the wage and salary labor force as the denominator).

[7]From 1976 onward, data exclude adult students (i.e., students age 18 and over) registered as unemployed during school vacations.

[8]Data for Italy could not be adjusted to U.S. concepts by age (see Technical Appendix). The adjusted overall rates for 1976 and prior years were very close to the unadjusted rates (for example, the rate of 3.7 percent in 1976 is adjusted to 3.6 percent on a U.S. basis). However, the rates for 1977 onward diverge to a greater extent (in 1978, the unadjusted rate was 5 percent, the adjusted rate, 3.7 percent).

[9]Based on data from revised Italian survey not entirely comparable with previous survey.

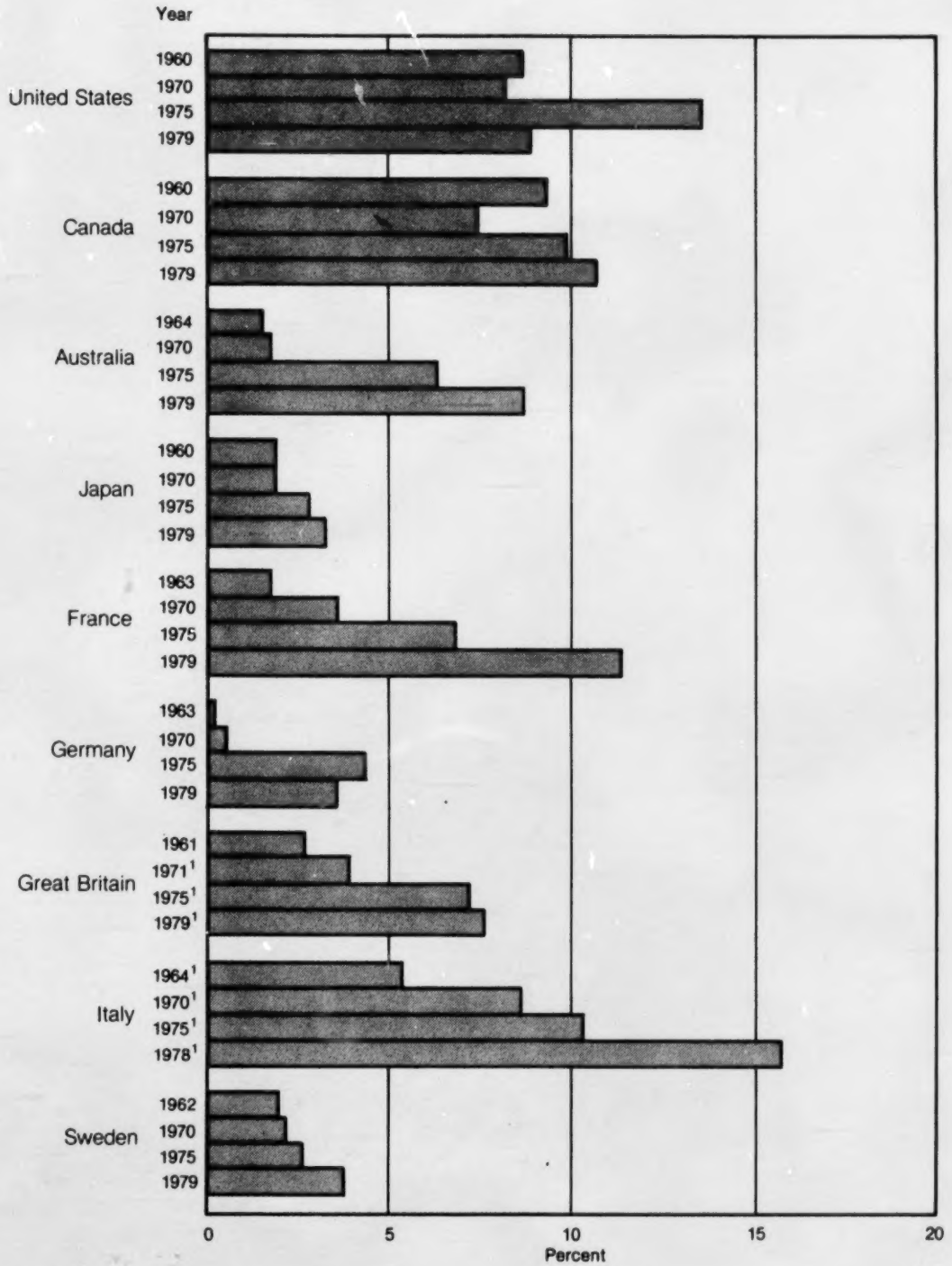
Chart 2 Teenage unemployment rates, selected years, 1960-79



[1] Not adjusted to U.S. concepts.

12

Chart 3 **Unemployment rates for young adults, selected years, 1960-79**



[1] Not adjusted to U.S. concepts.

ward but, at 3.7 percent, was still the lowest among the industrial countries.

Unemployment rates for young adults also surged upward during the recession, but the United States, Canada, and Italy were the only countries where they approached or exceeded 10 percent. The sharpest increases in unemployment rates for 20- to 24-year-olds between 1970 and 1975 were recorded in Australia and Germany, but the rates in both countries remained well below those in the United States, Canada, and Italy.

In 1976–79, youth unemployment rates declined somewhat in the United States but continued rising in the other countries, except that in Germany and Great Britain the increases leveled off. By 1977 or 1978, youth unemployment rates and teenage rates were higher in Canada, Australia, France, Great Britain, and Italy than in the United States. Rates for young adults were also higher, except in Australia. The more recent developments marked a dramatic change from 1975 and most previous years when the U.S. youth unemployment rate was by far the highest among the countries compared. Swedish youth unemployment rates began to rise in 1977, and by 1978 the teenage rate reached a peak of 8.2 percent. The rate moved down to 7.5 percent in 1979, but was still extremely high by Swedish standards.

Youth share of unemployment

There are wide international variations in the share of total unemployment borne by youth. Table 2 shows the percent distribution of the unemployed and the labor force by age for selected years since 1960. Throughout the period, Italy has had the highest proportion of the unemployed in the youthful age groups, yet one of the lowest proportions of youth in the labor force. In 1978, for example, two-thirds of the Italian unemployed were under 25, while only about one-sixth of the labor force was under 25. Australia was the only other country where more than half of the unemployed were under 25. In most years, Australia's youth share of the labor force was less than half the proportion of youth among the unemployed.

The proportion of youth among the unemployed was also relatively high in North America in the late 1970's—close to half—where they were only about a quarter of the labor force. In France, Great Britain, and Sweden, two-fifths of the unemployment but less than one-fifth of the labor force were youth.

Japan had, by far, the lowest component of youth among the unemployed at the end of the 1970's. Persons under 25 made up only slightly over one-fifth of the Japanese unemployed and about one-eighth of the work force. The proportion of German youth among the unemployed was also relatively low, 28 percent in 1979. German youth were 20 percent of the labor force. Germany and Japan were the countries where the youth share of unemployment most closely approximated their share of the labor force. In almost all the other countries, the proportion of youth among the unemployed was at least double their proportion in the labor force.

With the exception of Japan, youth have borne an increasing share of unemployment since 1960. Canada, the United States, and Great Britain had the sharpest increases. In North America, the biggest increase came between 1960 and 1970. In Great Britain, the largest increase occurred after 1970. The proportion of North American youth in the labor force has also risen significantly since 1960, although not as rapidly as youth unemployment. In Great Britain, however, the rise in the youth component of unemployment has occurred despite a decline in the proportion of youth in the labor force.

The proportion of youth among the unemployed dropped in Australia from 52 percent in 1964 to 44 percent in 1970. However, it rose sharply during the recession, peaking at 57 percent in 1977. Throughout the period, the youth share of the labor force has held steady around 27 percent. France, Germany, and Italy had rising proportions of unemployment borne by youth between the early 1960's and 1970. The French and Italian youth proportions have continued to rise slowly, but the German youth share, after a sharp increase in 1975, has since levelled off. Germany has had a virtually stable youth component in the labor force, about 20 percent, throughout the period. France and Italy have had slowly declining trends in the proportion of youth in the labor force.

In several countries, there were differences in trends for teenagers compared with young adults. In Australia, France, and Italy, the proportion of unemployment borne by teenagers moved down, while the proportion for young adults rose. Sweden had a relatively steady unemployment share for teenagers, but an increase in the proportion for young adults. In Japan, the teenage share has dropped sharply, while the young adult proportion rose rapidly between 1960 and 1970, but then declined to below the 1960 level by 1979.

Youth-adult ratios

Youth unemployment rates are, of course, affected by the overall job situation in each country. Therefore, comparative ratios of youth to adult unemployment rates are shown in table 3 and chart 4. Such ratios may also be affected by the general level of unemployment, but they more accurately reflect the relative problems of youth. In all years studied, Italy had the widest youth-adult differential. The United States also ranked relatively high until recent years. The narrowest gaps between youth and adult unemployment were found in Germany, Japan, and, until 1975, Great Britain.

In most of Western Europe and Australia, the youth-to-adult unemployment rate differential has been widening recently. Between 1970 and 1979, the differential grew from 2.4 to 3.5 in France, and from 2.2 to 3.4 in Sweden, for example. For France and Sweden,

Table 2. Percent distribution of the unemployed and the labor force by age, selected years, 1960–79

Country and date	Unemployed				Labor force			
	Under age 25			25 and over	Under age 25			25 and over
	Total	Teenagers[1]	Age 20 to 24		Total	Teenagers[1]	Age 20 to 24	
United States:								
1960	34	18	15	66	17	7	10	83
1970	48	27	21	52	22	9	13	78
1974	51	28	23	49	24	10	14	76
1975	46	22	23	54	24	10	15	76
1976	46	23	23	54	24	9	15	76
1977	47	24	23	53	24	9	15	76
1978	49	26	24	51	24	10	15	76
1979	49	26	23	51	24	9	15	76
Canada:								
1960	35	18	16	65	22	9	12	78
1970	45	25	20	55	25	10	15	75
1974	47	25	22	53	27	12	15	73
1975	47	25	22	53	27	12	16	73
1976	48	25	23	52	27	11	16	73
1977	48	24	24	52	27	11	16	73
1978	46	24	23	53	27	11	16	73
1979	47	24	23	53	27	11	16	73
Australia:[2]								
1964	52	38	14	49	27	14	13	73
1967	43	25	18	57	27	13	14	73
1970	44	27	17	57	27	12	15	73
1974	47	28	20	53	26	11	15	74
1975	52	33	19	48	26	12	15	74
1976	55	35	20	45	26	11	15	74
1977	57	37	20	43	27	12	15	73
1978	54	33	21	46	27	12	15	73
1979	56	35	21	44	27	12	15	73
Japan:								
1960	29	13	16	69	23	10	13	77
1970	37	10	27	63	22	6	16	78
1974	30	7	22	70	17	4	13	83
1975	25	6	19	73	15	3	12	85
1976	22	6	17	75	14	3	11	86
1977	25	6	18	76	13	3	11	87
1978	22	6	16	78	13	3	10	87
1979	21	6	15	79	13	3	10	87
France:								
March 1963	34	22	13	66	18	8	10	82
March 1970	37	17	20	63	20	6	13	80
March 1974	39	17	22	61	18	5	13	82
March 1975	39	16	23	61	17	5	13	83
March 1976	41	16	24	59	17	4	13	83
March 1977	41	16	25	59	17	4	13	83
March 1978	39	15	24	61	16	4	12	84
March 1979	40	15	24	60	16	4	12	84
Germany:								
April 1963	22	7	15	78	21	9	12	79
April 1970	34	22	12	67	19	8	10	81
April 1974	26	12	14	74	18	8	11	82
May 1975	30	15	16	70	20	9	11	80
May 1976	31	15	16	69	20	9	11	80
April 1977	31	13	17	69	19	9	11	81
April 1978	30	13	16	70	20	9	11	80
April 1979	28	13	15	72	20	9	11	80
Great Britain:								
Adjusted data								
April 1961	28	13	15	72	21	11	10	79
1971	32	[3]	[3]	68	21	[3]	[3]	79
1974	32	[3]	[3]	68	17	[3]	[3]	83
1975	35	[3]	[3]	65	17	[3]	[3]	83
1976	38	[3]	[3]	62	18	[3]	[3]	82
1977	38	[3]	[3]	62	18	[3]	[3]	82
1978	41	[3]	[3]	59	19	[3]	[3]	81

See footnotes at end of table.

Table 2. Continued—Percent distribution of the unemployed and the labor force by age, selected years, 1960–79

Country and date	Unemployed				Labor force			
	Under age 25			25 and over	Under age 25			25 and over
	Total	Teenagers[1]	Age 20 to 24		Total	Teenagers[1]	Age 20 to 24	
Great Britain—Continued								
Registered unemployed:[4]								
July 1971	31	15	16	69	21	8	12	79
July 1974	30	14	16	70	18	7	11	81
July 1975	42	22	19	58	19	8	11	81
July 1976[5]	44	28	16	56	19	8	11	81
July 1977	46	29	16	54	19	8	11	81
July 1978	45	29	16	55	19	8	11	81
July 1979	44	28	16	56	19	8	11	81
Italy:								
Unadjusted								
1964	56	36	21	44	21	11	10	79
1970	61	30	31	39	19	8	11	81
1974	65	33	32	35	17	7	10	83
1975	64	32	31	36	17	6	10	83
1976	64	32	32	36	16	6	10	84
1977[2]	66	34	32	34	17	7	10	83
1978[6]	66	33	33	34	17	7	10	83
Sweden:								
1962	33	20	13	69	18	9	9	82
1970	34	17	17	69	18	6	12	82
1974	38	20	18	62	17	6	11	83
1975	39	21	18	61	17	6	11	83
1976	39	21	18	61	17	6	11	83
1977	40	21	19	60	16	6	11	84
1978	40	20	20	60	16	6	11	84
1979	40	20	19	60	16	6	11	84

[1]16- to 19-year-olds in United States, France, Great Britain (1974 onward), and Sweden; 15- to 19-year-olds in Canada, Australia, Japan, Germany, and Great Britain (prior to 1974); and 14- to 19-year-olds in Italy.

[2]There is a discontinuity between the 1964 figures and those for later years and between the 1977 figures and those for later years. The impact on data continuity is small.

[3]Not available.

[4]Statistics on the registered unemployed are shown because data adjusted to U.S. concepts for 1979 onward are not available.

[5]From 1976 onward, data exclude adult students (i.e., students age 18 and over) registered as unemployed during school vacations.

[6]Based on data from revised Italian survey not entirely comparable with previous survey.

the teenage-to-adult ratio widened from about 3.5 to 5. Italy had the highest youth-adult ratio throughout this period, and it rose even higher to 9.7 by 1978, over three times the U.S. level. Teenage unemployment rates in Italy were over 12 times the rates for adults in 1978, up from 8 in 1970. Great Britain had very low differentials between youths and adults prior to 1975. In 1975, the ratio rose to 2.6 on a survey basis (U.S. concepts) and to over 3 on a registration basis. By 1978, the ratio on the survey basis was up to 3. Canadian, German, and Japanese youth-adult ratios have remained relatively low and stable in the 1970's, but are higher than they were in the 1960's. Canadian youth had jobless rates almost twice those of adults in 1960; in the 1970's, youth rates were around two and one-half times those for adults. German data for April 1963 indicate no difference between youth and adult unemployment rates, and this was true throughout the 1960's in Germany, except in the 1967–68 recession. By 1970, however, German youth rates were over twice as high as adult jobless rates. The German youth-adult ratio subsequently fell back to under 2 in 1974–79.

Although the overall youth-adult differential has held fairly steady in Japan, the teenage-to-adult ratio has been edging upward. In 1977, it peaked at 2.7 compared with just 1.5 in 1960 and 2.2 in 1970.

Australian youth had a jobless rate three times that of adults in 1964 and twice that of adults in 1970. In 1974–76 the differential widened and in 1977 moved higher still. The teenage differential was around 4 in 1964, but rose to about 5 in 1976–77. The differential narrowed somewhat in 1978, but edged upward again in 1979.

In the United States, in contrast to Western Europe, Canada, and Australia, the gap between youth and adult unemployment narrowed between 1970 and 1977. Americans under 25 had unemployment rates 3.3 times those for adults in 1970 and 1974. In 1975–77, the differential narrowed but rose in 1978–79 to about 3, still lower than in the early 1970's. The same general pattern was also true for ratios of teenage to adult unemployment. In the United States, the youth-adult differential tends to fluctuate in a countercyclical manner—in recessions, adult unemployment rates rise more sharply than youth rates, but adult rates also fall more rapidly in economic recoveries. Teenagers are more likely than adult men to enter the labor force during upswings and to withdraw from or fail to join the labor

Table 3. Ratios of youth to adult unemployment rates, selected years, 1960–79

Country	1960	1970	1974	1975	1976	1977	1978	1979
	Youth-to-adult ratio[1]							
United States	2.5	3.3	3.3	2.7	2.7	2.8	3.1	3.0
Canada	1.9	2.4	2.4	2.4	2.5	2.5	2.4	2.4
Australia	[2]3.0	2.1	2.6	3.0	3.4	3.6	3.2	3.5
Japan	1.4	2.2	2.1	1.9	1.8	2.1	1.9	1.9
France[3]	[4]2.5	2.4	3.0	3.0	3.3	3.4	3.3	3.5
Germany[5]	[6]1.0	2.5	1.6	1.8	1.9	1.9	1.7	1.6
Great Britain:								
U.S. concepts	[7]1.4	[8]1.8	2.3	2.6	2.8	2.8	3.0	([9])
Registrations[10]	([9])	[8]1.7	1.9	3.2	3.4	3.7	3.5	3.3
Italy[10]	[11]4.9	6.8	9.3	8.6	9.1	9.3	9.7	([9])
Sweden	[12]2.3	2.2	3.0	3.2	3.2	3.4	3.5	3.4
	Teenage-to-adult ratio[13]							
United States	3.3	4.6	4.4	3.3	3.5	3.6	4.1	4.1
Canada	2.3	3.3	3.0	3.0	3.1	3.0	2.9	3.0
Australia	[2]4.1	2.9	3.5	4.3	5.0	5.3	4.4	4.9
Japan	1.5	2.2	2.2	2.3	2.3	2.7	2.4	2.6
France[3]	[4]3.6	3.5	4.7	4.5	5.2	5.3	5.3	5.5
Germany[5]	[6]1.0	3.5	1.7	1.9	2.0	1.9	1.8	1.6
Great Britain:								
U.S. concepts	[7]1.2	([9])	([9])	([9])	([9])	([9])	([9])	([9])
Registrations[10]	([9])	[8]2.0	2.3	4.1	5.3	5.8	5.5	5.2
Italy[10]	[11]6.1	8.2	11.9	11.2	12.0	12.1	12.6	([9])
Sweden	[12]2.8	3.3	4.5	4.7	4.6	5.2	5.1	5.0

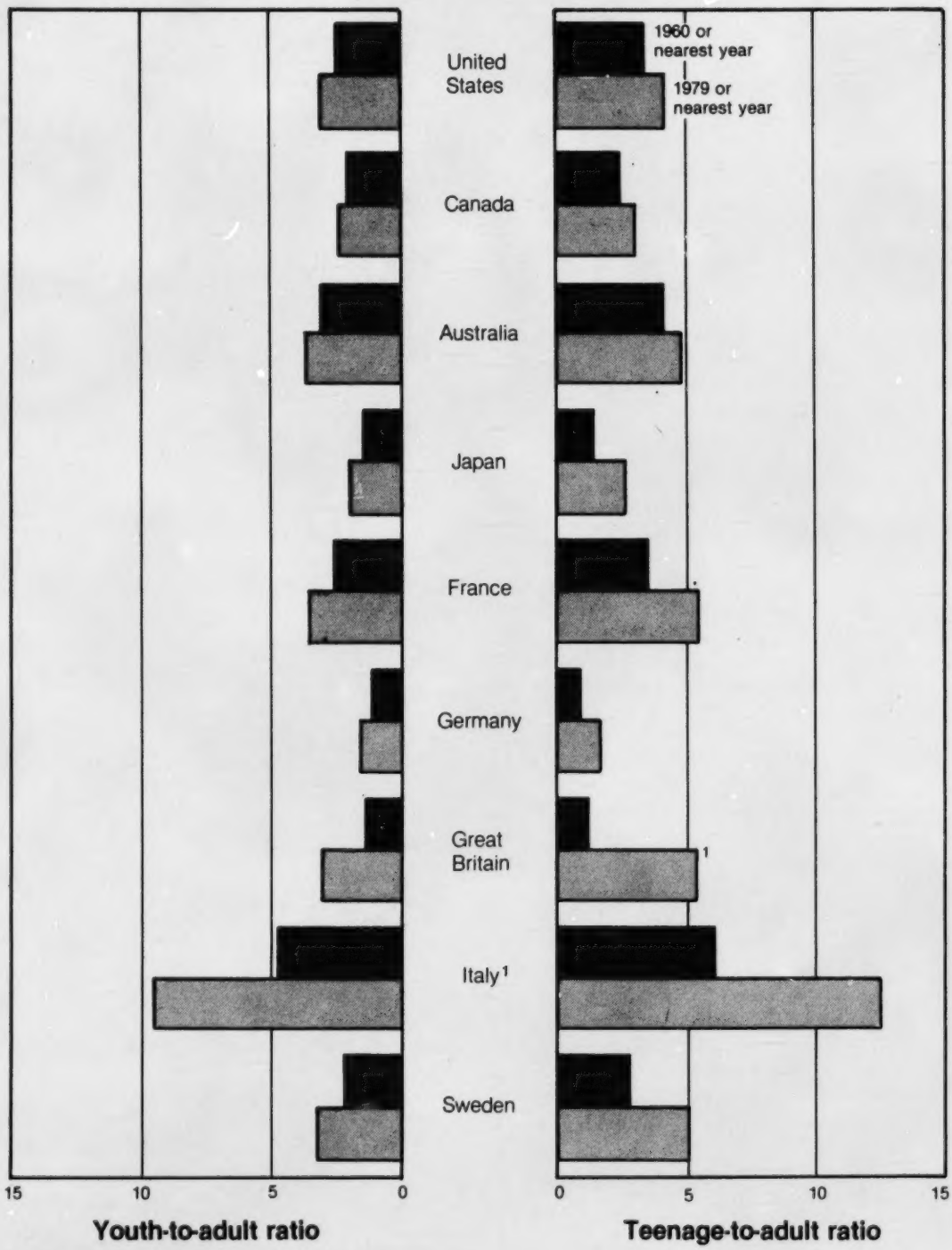
[1]Ratio of unemployment rate for persons under 25 to rate for persons 25 and over.
[2]1964.
[3]March or April for each year.
[4]March 1963.
[5]April or May for each year.
[6]April 1963.
[7]April 1961.
[8]1971.
[9]Not available.
[10]Not adjusted to U.S. concepts. British data are for July.
[11]1964.
[12]1962.
[13]Ratio of teenage unemployment rate to rate for persons 25 and over.

force during downswings, thus reducing cyclical variations in the teenage unemployment rate. Teenage labor force participation rates tend to level off during recessions and to resume their long-term upward trend during recoveries. Teenagers may decide to prolong their schooling when job opportunities are poor. When opportunities increase, a sizable group of 16- and 17-year-olds leave school in response.[8]

[8]Marcia Freedman, "The Youth Labor Market," *in From School to Work: Improving the Transition,* a collection of policy papers prepared for the National Commission for Manpower Policy (Washington, Government Printing Office, 1976), p. 24.

Chart 4

Ratios of youth and teenage to adult unemployment rates, 1960 and 1979



[1] Not adjusted to U.S. concepts.

Chapter 3. Factors Affecting Youth Unemployment

International differences in youth jobless rates are partly the result of differences in the timing and severity of recessions. However, in times of both prosperity and recession, the United States has had youth unemployment rates which rank among the highest in the industrial world. The United States has also had a rather wide differential between youth and adult unemployment rates, although some countries have caught up with or surpassed the United States in recent years, as discussed previously.

Some of the factors which underlie international differences in youth unemployment rates are discussed in this chapter. Supply and demand trends in the youth labor market are discussed first. Other aspects considered are the student labor force, apprenticeship, counseling and placement services, and the youth minimum wage. Differences in minority group unemployment are also taken up. Finally, there is an attempt to identify those factors responsible for the recent emergence of high youth unemployment abroad and the changing comparative picture.

Trends in labor supply

The United States and Canada have had rapid increases in the youth labor force—both teenagers and young adults—since the early 1960's. The European countries and Japan, in contrast, have had a declining teenage work force and a decline or little growth for youth 20 to 24 years of age.

Tables 4 and 5 present levels and growth rates of the teenage and young adult labor force for the period 1960 to 1979. The number of teenagers in the U.S. and Canadian work force grew at an annual rate of 3.6 to 4 percent. Australian teenagers were the only others with a rising trend over this period. A very sharp decline occurred for teenagers in Japan, Italy, and France, with lesser rates of decrease in Great Britain and Sweden, and virtually no change in Germany. The young adult work force increased more rapidly or declined more slowly than the teenage labor force in all countries studied except Germany. In three countries with a declining teenage labor force, the young adult labor force had an upward trend (France, Great Britain, and Sweden). Great Britain, Germany, Italy, and Japan had overall declines in the labor force under age 25 during the 1960–79 period (see chart 5).

There were some dramatic changes in labor force trends in the 1970's. The growth rates of the youth labor force in North American countries moderated in the latter part of the 1970's. For instance, the U.S. teenage labor force grew at an annual rate of 4 percent during the 1960–75 period, but growth then tapered off, and in 1979 the teenage labor force declined. There was also a moderation in the growth of the young adult labor force in North America.

In Great Britain and Italy, the youth labor force rose during 1975–79 after many years of decline. Growth in the Australian teenage labor force accelerated during the same period. The declining trend for teenagers was halted in Germany and Sweden in the first half of the 1970's, but resumed in the latter half. In Japan, the teenage decline became even more pronounced in the first half of the 1970's through 1976.

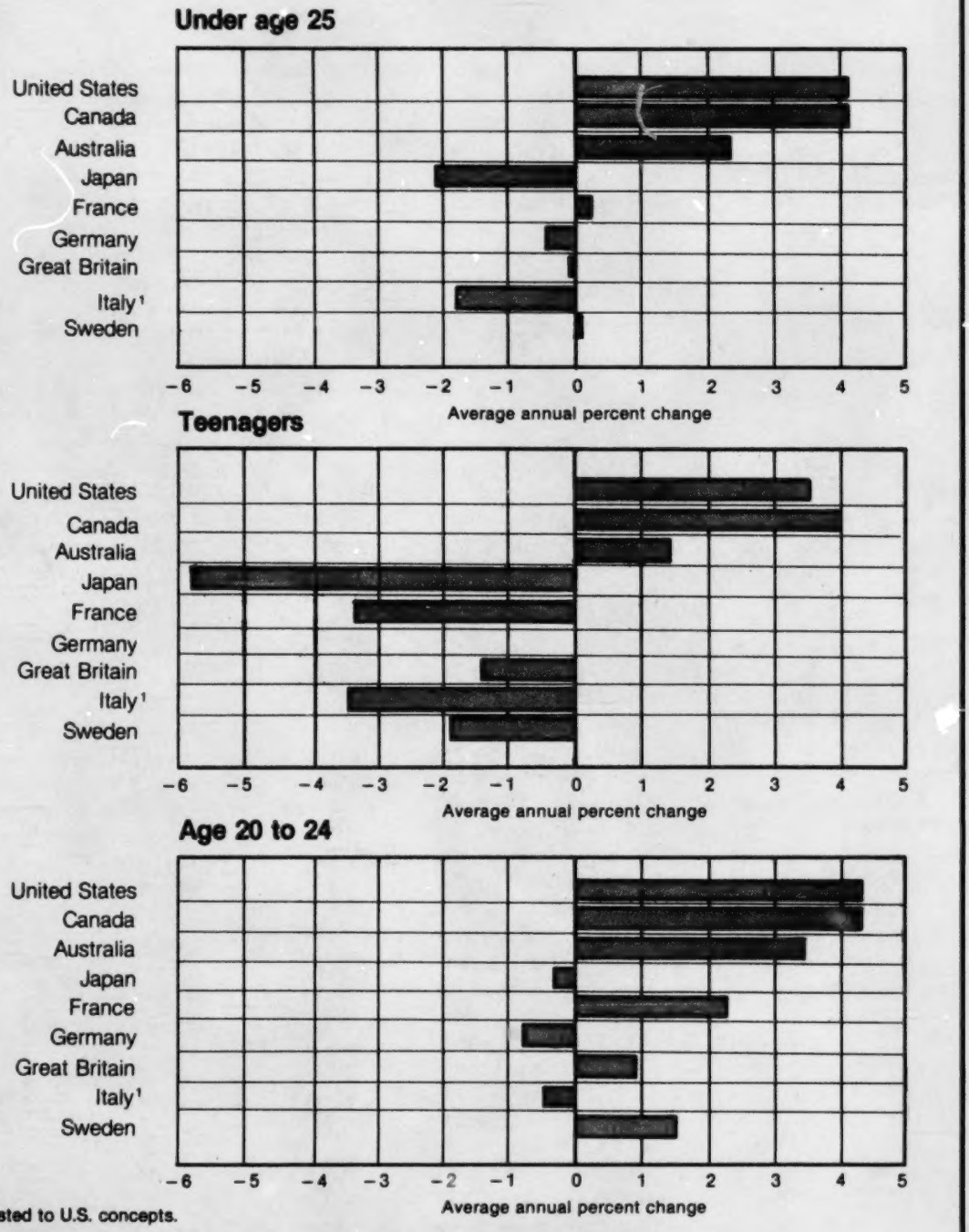
Germany and Italy have had recent turnarounds in the trend of the young adult labor force. For both countries the earlier declining trend has been supplanted by a rising trend since around 1975. In Japan, the young adult labor force rose in the 1960's, but declined in the 1970's.

There are also large differences in the relative size of the youth labor force. The following tabulation shows the percent of the labor force accounted for by youth in 1979. Canada and Australia had the highest proportions of young people in their work force, with the United States ranking next. Japan, France, and Sweden had substantially lower proportions. The international differences were particularly wide for teenagers, who have much higher unemployment rates than young adults.

	All youth	*Teenagers*	*Young adults*
United States	24	9	15
Canada	27	11	16
Australia	27	12	15
Japan	13	3	10
France	16	4	12
Germany	20	9	11
Great Britain	19	8	11
Italy (1978)	17	7	10
Sweden	16	6	11

The United States and Canada, then, were under unusual pressure from a relatively large and fast-growing teenage and young adult labor force which helped contribute to higher rates of both overall and youth

Chart 5 Trends in the youth labor force, 1960-79



[1] Not adjusted to U.S. concepts.

Table 4. Youth labor force, selected years, 1960–79

(Thousands)

Country	Under age 25				Teenagers				Age 20 to 24			
	1960	1970	1975	1979	1960	1970	1975	1979	1960	1970	1975	1979
United States	11,544	17,830	22,265	24,780	4,841	7,247	8,798	9,512	6,703	10,583	13,467	15,268
Canada	1,375	2,131	2,701	3,025	598	851	1,153	1,259	777	1,279	1,548	1,766
Australia	[1]1,223	1,474	1,618	1,755	[1]641	647	714	787	[1]581	828	904	967
Japan	10,340	10,950	8,080	6,960	4,450	2,970	1,630	1,440	5,890	7,980	6,450	5,520
France[2]	[3]3,437	4,159	3,786	3,621	[3]1,511	1,317	1,027	877	[3]1,926	2,842	2,759	2,744
Germany[4]	[5]5,630	4,939	5,128	5,316	[3]2,341	2,206	2,378	2,352	[3]3,289	2,732	2,750	2,965
Great Britain[5]	[6]5,110	[7]5,121	4,731	4,994	[6]2,616	[7]2,110	1,937	2,039	[6]2,494	[7]3,011	2,794	2,956
Italy[6]	4,779	3,649	3,241	[8]3,432	2,474	1,497	1,251	[8]1,326	2,305	2,152	1,990	[8]2,106
Sweden	[10]678	693	683	691	[10]331	230	246	241	[10]347	463	436	450

[1]1964.
[2]Data for March or April each year.
[3]1963.
[4]Data for April or May each year.
[5]Mid-year estimates.
[6]1961.
[7]1971.
[8]Not adjusted to U.S. concepts and not adjusted for break in series related to new labor force survey instituted in 1977.
[9]New series not entirely compatible with previous years. Data for 1978.
[10]1962.

unemployment. Although labor force growth rates in North America have not been as rapid since 1975 as previously, they are still high in comparison with the other industrial countries. The other countries, for the most part, did not have to deal with increasing numbers of young people coming onto the labor market until recently, if at all. The accelerating rate of entry of teenagers into the Australian labor market since 1975 has certainly been a contributing factor to higher youth unemployment. This has also undoubtedly been a factor in Great Britain and Italy where more teenagers were coming onto the labor market at a time of slackening economic activity. Diminishing rates of decline in teenagers entering the labor market in Japan also coincided with a period of sluggish economic growth.

Trends in birth rates, population, and participation rates underlie the differing trends in the youth labor force of the industrial countries. A bulge in the youth population occurred in many Western European countries, Australia, and Japan as a result of high birth rates following World War II.[9] However, there were important differences in degree and timing. The birth rate rose sharply and remained high in the United States, Canada, and Australia until the latter part of the 1950's, resulting in a bulge in the population age 15 or 16 to 24 that lasted from the early 1960's to the mid- or late 1970's. In most of Western Europe and in Japan, on the other hand, the postwar increases in birth rates were not as large as in North America and they soon fell back to more normal levels. Italy and Great Britain had short-lived postwar baby booms, while German birth rates in the early postwar years hardly increased at all. In Sweden, birth rates declined from 1945 to around the mid-1950's. France, unlike the rest of Europe, had a sharp postwar increase in birth rates which was sustained until about 1950. Japanese birth rates, after a rapid but short postwar rise, fell very sharply to levels far below those of the prewar period.

During the 1960's, the United States, Canada, and Australia experienced declines in birth rates. In con-

[9] For further discussion and charts on birth rate trends, see Margaret S. Gordon, *Youth Education and Unemployment Problems: An International Perspective* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1979), pp. 17–20. See also Beatrice G. Reubens and others, *The Youth Labor Force 1945–1995: A Cross-national Analysis* (Montclair, N. J., Allanheld, Osmun and Co., 1981), chap. 2.

Table 5. Trends in the youth labor force, selected periods, 1960-79

(Average annual percent change)

Country	Under age 25				Teenagers				Age 20 to 24			
	1960–79	1960–70	1970–75	1975–79	1960–79	1960–70	1970–75	1975–79	1960–79	1960–70	1970–75	1975–79
United States	4.1	4.4	4.5	2.7	3.6	4.1	4.0	2.0	4.4	4.7	4.9	3.2
Canada	4.2	4.4	4.9	2.9	4.0	3.6	6.3	2.2	4.4	5.1	3.9	3.3
Australia	[1]2.4	[1]3.2	1.9	2.1	[1]1.4	[1].1	2.0	2.5	[1]3.5	[1]6.3	1.8	1.7
Japan	-2.1	.6	-5.9	-3.7	-5.8	-3.9	-13.0	-3.0	-.3	3.1	-4.1	-3.8
France	[2].3	[2]2.8	-1.9	-1.1	[3]-3.4	[3]-2.0	-4.9	-3.8	[2]2.2	[2]5.7	-.6	-.1
Germany	[3]-.4	[3]-1.9	.8	.9	[2]0	[2]-.9	1.5	-.3	[3]-.7	[3]-2.6	.1	2.1
Great Britain	[3]-.1	[4]0	[5]-2.0	1.4	[3]-1.4	[4]-2.2	[5]-2.2	1.3	[3].9	[4]1.9	[5]-1.9	1.4
Italy[6]	[7]-1.8	-2.6	-2.3	[8]1.9	-3.4	-4.9	-3.6	[8]2.0	-.5	-.7	-1.6	[8]1.9
Sweden	[8].1	[8].3	-.3	.3	[9]-1.9	[9]-4.5	1.4	-.5	[8]1.5	[8]3.7	-1.2	.8

[1]Initial year 1964.
[2]Initial year 1963.
[3]Initial year 1961.
[4]1961–71.
[5]1971–75.
[6]Not adjusted to U.S. concepts and not adjusted for break in series related to new labor force survey instituted in 1977.
[7]1960–78.
[8]1975–78.
[9]Initial year 1962.

trast, Germany, Great Britain, Sweden, and Italy had rising birth rates in the early to mid-1960's and Japan had a modest rise in the latter part of the 1960's.

The result of these trends in birth rates was that the United States, Canada, Australia, and France had very rapid increases in the teenage population of working age during the 1960's. In the 1970's, the growth rates dropped off considerably, and, in fact, the teenage population in the United States has been declining since 1977. By contrast, Germany, Great Britain, Italy, and Sweden had fairly slow growth or even declines in the teenage population during the 1960's, but an upswing in growth in the 1970's. Japan had a low rate of increase in the teenage population during the 1960's, a sharp downward trend in the first half of the 1970's, and an upward trend in the second half of the decade.

Population growth patterns for young adults were similar to those for teenagers, with a few exceptions. Japan and Sweden joined North America, France, and Australia in a high population growth rate for young adults in the 1960's, although teenage population growth was very slight for Japan and teenagers actually declined in Sweden during the same period. Like the trend for their teenagers, population growth for young adults was relatively slow during the 1960's in Germany, Great Britain, and Italy. Population growth accelerated for German young adults in the first half of the 1970's, and in Great Britain and Italy an acceleration occurred in the second half of the decade.

Upward population trends were translated into rapid labor force growth for young people in the United States, Canada, and, to a lesser extent, in Australia. However, this was not the case in all countries. In France, for example, where the teenage population of working age grew at a rapid rate in the 1960's, this did not result in any increase in the number of teenagers coming onto the labor market because labor force participation rates for these young people fell sharply. Table 6 shows youth labor force participation rates for two years, one in the early 1960's and one in the late 1970's. Between these two periods, teenage activity rates declined in all countries except the United States and Canada. The sharpest drop occurred in Japan, where teenage participation rates fell from 50 percent in 1960 to under 19 percent in 1978. Very large declines also occurred in Italy, France, and Germany. Great Britain, Australia, and Sweden recorded more moderate decreases. There was also a tendency for participation rates of young adults to decline outside North America, although not as precipitously as for teenagers.

The declining trends in youth labor force activity outside North America have resulted from the rapid expansion of school attendance. In the United States and Canada, school attendance has also increased, but in these two countries many youngsters combine school with work so that the expansion of educational enrollments has not lowered work activity. In the other countries where few students are in the labor force, increases in school enrollment rates caused youth participation rates to decline. Table 7 shows trends in full-time enrollment rates for teenagers and young adults. Foreign enrollment rates were well below the U.S. rates in 1960 (except for young adults in Sweden). Since 1960, there have been very large increases in enrollment rates abroad, but smaller increases in the United States where rates were already high in 1960.

In some countries, recent reversals in participation rate trends have occurred which are not evident from table 6, since it shows only two years. Participation rates for both teenagers and young adults in Australia, Sweden, and Italy declined in the 1960's, but have moved upward from about the mid-1970's onward. In other countries, the rate of decline is decelerating. One Swedish labor market analyst believes that the recent uptrend indicates that Swedish students have begun to

Table 6. Civilian labor force participation rates by age, selected years, 1960–78

Country and date	Under age 25			25 and over
	Total	Teenagers	Age 20 to 24	
United States:				
1960	56.4	47.5	65.2	60.0
1978	68.2	58.0	76.9	61.7
Canada:				
1960[1]	50.4	47.5	69.4	55.7
1978	64.4	51.5	78.1	62.0
Australia:				
1964[1]	71.9	68.7	75.8	56.7
1978	70.2	61.1	80.0	59.4
Japan:				
1960	62.8	50.1	77.7	69.0
1978	44.2	18.8	69.4	66.9
France:				
March 1963	63.1	52.5	75.0	56.6
March 1978	50.3	27.0	68.9	58.0
Germany:				
April 1963	74.5	67.8	80.1	55.9
April 1978	59.1	47.1	74.3	53.0
Great Britain:				
April 1961	75.0	72.5	77.9	57.1
1978	68.4	59.5	76.3	61.5
Italy:[2]				
1960	60.7	57.8	64.2	53.9
1978	38.2	26.2	58.2	48.4
Sweden:				
1962	70.6	64.8	77.1	62.4
1978	70.8	55.2	83.2	65.0

[1]BLS estimates roughly comparable with 1978 data.

[2]Data not adjusted to U.S. concepts and not adjusted for break in series related to new labor force survey instituted in 1977.

NOTE: Data for the United States, Canada, and Italy refer to the civilian noninstitutional population. For the other countries, the population data include persons residing in institutions. Therefore, the participation rates for these other countries are slightly understated in comparison with the rates for the United States, Canada, and Italy.

Table 7. Full-time school enrollment rates, 1960, 1970, and 1975

(Percent)

Country	Age 15 to 19			Age 20 to 24		
	1960	1970	1975	1960	1970	1975
United States	64	74	72	12	20	22
Canada	49	65	66	7	14	15
Australia	37	39	44	1	3	5
Japan	45	64	76	4	12	14
France	32	45	53	7	10	12
Germany	35	47	48	7	10	12
Great Britain	17	34	45	5	6	8
Italy	19	32	43	5	9	17
Sweden	37	56	57	15	16	14

Source: Beatrice G. Reubens and others, *The Youth Labor Force 1945-1995: A Cross-national Analysis* (Montclair, N.J., Allanheld, Osmun and Co., 1981).

adopt the North American pattern of seeking part-time jobs.[10] A further factor is that school enrollment rates are tending to rise more slowly after the rapid expansion of the 1960's (table 7).

In summary, rapid growth of the youth population combined with sharply rising participation rates to bring about large increases in the teenage and young adult labor force in North America. Australia's rapid youth population growth, in contrast, was not fully translated into labor force growth because teenage participation rates declined. In France, the decline in activity rates for teenagers was so large that it completely overrode the rapid growth of the youth population in the 1960's. The decline in participation rates for teenagers in the other countries, combined with slower population growth for this age group, resulted in a pronounced decline in the teenage labor force from 1960 to at least the mid-1970's. Declines in activity rates for young adults were not nearly as great as they were for teenagers; therefore, the young adult labor force did not decline as fast or in some cases (France, Great Britain, Sweden) it increased while the teenage work force was declining.

Demand factors

During the 1960's, a tight labor market and strong economic growth in most of Europe, Australia, and Japan fostered a high demand for young workers. Labor shortages gave many young people opportunities to choose among jobs and to enter the occupational hierarchy at higher levels than would have been possible in less favorable times. Japan, Great Britain, and Germany were countries where employers recruited young people straight from school and provided training for many of them. New entrants were eagerly sought and employers were willing to take youngsters without occupational skills or previous work experience. This favorable outlook for youth abroad during the 1960's changed during the 1970's as structural problems were intensified by deep recession.

Even during the 1960's, however, the acceptance of youth as discussed above was less common in France and Italy, and even less visible in the United States where employers exhibited little active interest in hiring teenagers.[11] Indeed, recent studies show that two-thirds to four-fifths of U.S. employers are reluctant to hire youth under age 21 for regular, full-time jobs.[12] Particularly where substantial on-the-job training costs are involved, employers may calculate that their investment would be better spent on workers over age 21, rather than on teenagers. Employers often cite legal restrictions on hours and working conditions for teenagers as additional impediments to employing them.

Long-run structural changes in the labor market have adversely affected the demand for young people in most of these countries. The shift out of agriculture and the decline of self-employment or small family businesses have greatly reduced family employment opportunities for youth. The decline in agricultural employment has been going on for decades. The United States and Great Britain have the smallest proportion of the labor force engaged in agriculture among the countries studied; Japan and Italy have the largest.[13] Family employment opportunities in agriculture and small business did not always provide steady employment for young people but did give them some work experience.

Further affecting the demand for young workers has been the changing demand for skills in the industrial economies. A decline in the relative importance of unskilled jobs, in which many youth find their first employment, has taken place in the course of industrialization. There are many low-skilled jobs in the rapidly growing service sector that may tend to replace diminishing unskilled openings in the industrial sector, but service industries are also affected to some extent by changes which reduce demand for the unskilled. A 1974 British study pointed out that it was becoming more difficult to help those unqualified, untrained young people who normally entered jobs below craft level.[14] Job opportunities for such young persons were getting few-

[10] Gosta Rehn and K. Helveg Petersen, *Education and Youth Employment in Sweden and Denmark* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1980).

[11] Beatrice G. Reubens, "Foreign and American Experience with the Youth Transition," in *From School to Work: Improving the Transition*, a collection of policy papers prepared for the National Commission for Manpower Policy (Washington, Government Printing Office, 1976), p. 274.

[12] *Employment and Training Report of the President* (Washington, U.S. Government Printing Office, 1978), p. 75. See also *Youth Unemployment and Minimum Wages*, Bulletin 1657 (Bureau of Labor Statistics, 1970), pp. 128–31 and 183, and Norman Bowers, "Young and Marginal: an Overview of Youth Unemployment," *Monthly Labor Review*, October 1979, pp. 4–5.

[13] For further data and discussion, see *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, 1978), pp. 23–26.

[14] *Unqualified, Untrained, and Unemployed*, Report of a Working Party set up by the National Youth Employment Council (London, Her Majesty's Stationery Office, 1974), p. 1.

er, a trend that could be largely masked in Great Britain in times of high growth, but which became apparent in the more recent high unemployment years. Thus, young persons who used to be able to find jobs as delivery boys, lorry drivers' mates and messengers could no longer obtain such jobs because employers were discontinuing them. These positions came to be regarded by employers as "surplus jobs" in the stringent economic climate in Great Britain beginning in 1968. Also, the position of junior operative, formerly open to 15-year-olds and leading to skilled status, is disappearing or is reserved for 18-year-olds. As continuous processes, shift work, weekend work, and heavy capital investment have become common in manufacturing, British employers have raised the minimum age for recruitment and are asking for higher academic credentials.

Sweden, like Great Britain, has a problem with 16- and 17-year-olds who leave school after basic compulsory education, find only short-term, dead-end jobs, and become unemployed shortly thereafter. Shops and offices have registered a much-reduced demand for unskilled labor.[15] Australian analysts have also reported that technological and organizational changes are reducing employment opportunities for the young.[16]

Growing rigidities in the labor market have also adversely affected employment prospects for young people. Formal seniority provisions in collective bargaining agreements prevent the employer from laying off older workers in recessions, and this typically results in greater instability of employment for young people, who have little seniority and are the first to be laid off. During the 1970's, there was considerable strengthening in job security provisions for adult workers in Western Europe and Japan. An OECD study of job security arrangements in France, Germany, and Great Britain indicates that management prerogatives in dismissing labor have been curtailed substantially.[17] This trend started in the late 1960's, but was considerably accelerated during the 1974–75 recession. The OECD study notes that the increased job security of those already employed may reduce considerably the job opportunities for new labor market entrants, particularly youth. Employers have become extremely reluctant to take on new, untried workers because they feel they will not be able to dismiss them if they do not work out.

A 1976 study by the German Federal Labor Institute corroborated the OECD study, attributing higher youth unemployment in Germany partly to regulations protecting older, longer term employees.[18] The Institute noted that such regulations have been expanded significantly in legal, wage, and industrial agreements and have contributed to a redistribution of the unemployment risk toward young people in Germany. The 1976 revisions to the Youth Protection Labor Law also contributed to the reluctance of German employers to hire the young. These revisions, applying to persons under 18 years of age, lengthened minimum annual vacations, limited weekly hours of work to 40 (44 previously), and provided that shifts could not exceed 10 hours. During the 1960's in Germany, there was widespread evasion of existing youth protection laws because of the labor shortage. The 1976 law strengthened the enforcement machinery for these provisions.

Swedish and Italian labor market experts have also spoken of the adverse effects of protective legislation on new entrants.[19] The problem is viewed as particularly acute in Italy where employers reportedly try to avoid the hiring of new workers to the maximum extent possible, because it is virtually impossible to discharge a worker once hired. Both law No. 300 of May 1970—the "Workers' Statute"—and law No. 604 of July 1966 on "dismissal for cause" contain provisions which are very restrictive for employers. These laws establish a series of rights for workers and virtually no recourse for employers. As an example, article 5 of law No. 300 prescribes that the employer may conduct investigations into the abuse of sick leave "solely through the inspection services of the competent social insurance agency." By the time the inspection services get around to checking on the legitimacy of the claimed absence, the worker has long since been back on the job.

The student labor force

The working student is very much an American phenomenon. No other country has so large a proportion of those in school also in the labor force during the school year. The frequent entries and exits of students characteristic of the U.S. labor market do not occur to any significant extent in Western Europe and Japan. Canada also has substantial student labor force activity. There is growing student participation in the work force in Australia, but it is still small compared with the United States and Canada.

Information on the school enrollment and labor force status of the population age 16 to 34 in the United States is collected annually in the October supplement to the labor force survey.[20] Data for October, which is close

[15] *Ibid.*, p. 79.

[16] G. W. Ford, "The General Problems of Youth Unemployment," in *Youth Unemployment*, Academy of the Social Sciences in Australia, Second Academy Symposium, Proceedings, Nov. 7–8, 1977, p. A–3.

[17] John Gennard, *Job Security and Industrial Relations* (Paris, Organization for Economic Cooperation and Development, 1979).

[18] Study quoted in Klaus von Dohnanyi, *Education and Youth Employment in the Federal Republic of Germany* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1978), p. 34.

[19] Reubens, "Foreign and American Experience," p. 287; and Organization for Economic Cooperation and Development, *Review of the Labor Market Situation in Less Industrialized Member Countries* (Paris, OECD, Nov. 7, 1978, unpublished).

[20] For example, see Anne M. Young, "School and Work Among Youth During the 1970's," *Monthly Labor Review*, September 1980, pp. 44–47.

to the beginning of a new school year, may not be fully representative of all the school months. Students are not explicitly identified in the U.S. survey during the rest of the year, although young people 16 to 21 years old reporting school as their major activity are tabulated by labor force status each month. For students in the labor force, these monthly data substantially underreport school enrollment because many part-time students may report work as their major activity. The October 1979 supplementary survey recorded 1.6 million more 16- to 21-year-olds both in school and in the labor force than the total derived from the major activity question in the monthly survey. Because of the shortcomings of U.S. data with regard to measuring student labor force activity, the National Commission on Employment and Unemployment Statistics has recommended that youth enrollment status be determined each month in the U.S. surveys, rather than only annually in October.[21]

The monthly data on young persons age 16 to 21 indicate much higher unemployment rates for those whose major activity is school. In 1979, such persons had an unemployment rate of 18.1 percent. For others in the same age group, the jobless rate was 12.7 percent. The unemployment rate for both groups combined was 13.9 percent, indicating that the in-school unemployed added over 1 percentage point to the unemployment rate for the 16- to 21-year-old age group. The higher rate for students may reflect their limited availability with respect to hours of work and the time limitations on their job-hunting efforts because of the constraints of classroom schedules.[22] Those whose major activity was school constituted 22 percent of the labor force and 28 percent of the unemployed in this age group. Excluding the summer vacation months of June through August, when most of the persons who had formerly reported school as their major activity drop out of this category, this "in school" group constitutes 29 percent of the labor force and 38 percent of the unemployed age 16 to 21.

The October surveys indicate a paradoxical impact of student labor force activity on U.S. youth unemployment rates: Student unemployment tends to increase overall youth unemployment rates but to decrease the separate rates for teenagers and young adults. The following tabulation of unemployment rates for October 1979 illustrates this point.

	All youth	*Enrolled in school*	*Not enrolled in school*
16 to 24 years	11.4	13.0	10.8
16 to 19 years	15.9	15.2	16.7
16 to 17 years	17.4	16.3	24.1
18 to 19 years	14.8	12.9	15.7
20 to 24 years	8.8	8.6	8.8
20 to 21 years	10.1	9.3	10.3
22 to 24 years	8.0	7.8	8.0

Although unemployment rates for persons 16 to 24 years of age are higher for those enrolled in school, all the component age groupings show lower rates for students than for nonstudents. The reason that the overall unemployment rate is higher for students is simply the difference in age composition of the student and nonstudent groups. Those in school tend to be younger than those out of school, and for that reason have higher unemployment rates *on average*. Teenagers make up two-thirds of the in-school labor force, but only one-quarter of the out-of-school labor force under 25. Since teenagers have much higher unemployment rates than young adults, their larger representation in the in-school work force causes the aggregate unemployment rate for students age 16 to 24 to be higher than the rate for nonstudents in that age aggregate.

Neither the October surveys nor the monthly "major activity" data record the effect of student unemployment during summer vacations. An unemployment rate for students encompassing the summer vacation period would probably be higher than the rate during school term. During the summer, the job market becomes flooded with youthful applicants.

When their vacation period unemployment and in-school unemployment are combined, students in the U.S. labor force do pull the yearly youth unemployment rate upward somewhat. In other countries, where there are not as many young people in school and also a lesser seasonal influx of students into the labor force during vacations, youth unemployment rates are not subject to as much upward pressure by the student work force. In addition, as mentioned earlier, school vacation workseeking is not even recorded in a few of the other countries because of the timing of their surveys (France, Germany). The high degree of student labor force activity in the United States also exaggerates the proportion of youth in the unemployment total relative to countries with little student participation in the labor force. If all American in-school teenagers who were in the labor force in October 1979 were removed, the U.S. teenage labor force would drop by 46 percent. The teenage labor force participation rate would fall from 56 to 26 percent—almost the same as in France and Italy.

Labor force participation rates for U.S. students have been rising rapidly. Between 1967 and 1977, for example, the increase was about 5 percentage points for males and 13 points for females. About 45 percent of teenage students were economically active at the time of the October 1979 survey, and about 57 percent of young adult students (both full- and part-time) were also eco-

[21] National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (Washington, Government Printing Office, 1979), p. 90.

[22] Anne M. Young, "Employment of School Age Youth," *Monthly Labor Review*, September 1970, p. 9.

nomically active. The rise of student participation in the U.S. labor force has been attributed to several factors including need for (or preference for) earnings to supplement support received from family or other sources, increased participation in work-study programs, and increases in the proportion of college students enrolled in 2-year colleges, whose students have higher activity rates than those in 4-year colleges.[23]

In the United States in recent years, 30 percent of all employed persons age 16 to 24 are enrolled in school. Similar data are also available for Canada, where student labor force activity, although substantial, is not as widespread as in the United States. In October 1976, 24 percent of all employed Canadians age 15 to 24 were enrolled in school. Students accounted for 7 percent of the total U.S. civilian labor force and 6 percent of the Canadian work force.

Unlike the situation in the United States, the unemployment rate for Canadian students is substantially lower than the unemployment rate for all young people, on average. For example, the October 1976 student unemployment rate for Canada was 6.5 percent, while the rate for all 15- to 24-year-olds was 11.9 percent, and the rate for persons of all working ages was 6.6 percent. Full-time students had a jobless rate of 10.6 percent, while part-time students had a much lower rate—3.9 percent. For the United States the October 1978 survey indicated a student unemployment rate of 12.5 percent, while the rate for all 16- to 24-year-olds was 10.8 percent, and the national unemployment rate, 5.8 percent.

Canadian students, like U.S. students, have a higher unemployment rate during summer vacation than during school term. In May 1979, Canadians under age 25 who attended school in March and were planning to return to school in the autumn had a jobless rate of 13.3 percent. This was just above the 13.1-percent rate for all other youth, but well above the national unemployment rate of 7.5 percent.

Australia also publishes some data on the student work force. Although nominally covering all teenagers from 15 to 19, the data effectively concern 15- to 17-year-olds only, since the definition of students relates only to those enrolled full time at regular secondary schools, which few 18- or 19-year-olds attend. Excluded from the student work force figures are persons enrolled at colleges, universities, and trade and business schools. Because of these exclusions, as well as the exclusion of part-time students, the proportion of the teenage labor force enrolled in school is understated compared to measures used in the United States and Canada. In July 1979, a month when school is in session in Australia, 12 percent of all employed teenagers were attending school (as defined above). The figure from the U.S. October 1979 survey was 55 percent (ages 16 to 19). Australian teenage students have above-average unemployment rates compared with nonstudents. In July 1979, the teenage student rate was 20 percent, while the rate for teenage nonstudents was 16 percent. In the United States, the rates for teenage students tend to be a few percentage points lower than the rates for nonstudents. Canadian teenagers who are also students have much lower jobless rates than their nonstudent counterparts.

The Japanese labor force survey regularly reports the number of persons who are engaged partly in work besides attending school. In recent years, such persons have accounted for less than 1 percent of Japan's employed population. In the United States, a comparable figure is 9 percent. Assuming that all Japanese working students were under the age of 25, this would mean that 6.7 percent of employed 15- to 24-year-olds combined work and school in 1979, up from 3.6 percent in 1970. According to a Ministry of Education survey, about one-fifth of Japanese college and university students have part-time jobs during the school term, mostly as tutors to younger children for 30 to 50 hours a month. Thus, Japanese college students who work participate in the regular labor market to a small extent. No data are collected on student unemployment in Japan.

Separate figures for employment and unemployment of students are not regularly collected in the labor force surveys for the other countries. There has been no impetus toward collecting such information because student labor force participation has been so low. Recently, there have been indications in several countries that this situation may be changing, but data collection has not yet caught up with the increasing propensity of young people to combine education and work.[24] Furthermore, European young people and especially students frequently take unrecorded work[25] so as to retain the advantages of student status for themselves or their parents. This type of activity usually goes unreported in labor force surveys.

There are also some data for Great Britain, Sweden, and Germany which are suggestive of the level of student labor force activity. British full-time students who also worked accounted for only 9 percent of total employment of 15- to 24-year-olds in 1972. This figure is an annual average; a figure for students working during the school term only (as reflected in the U.S. figures for October) would be considerably lower. Even

[23] Anne M. Young, "Students, Graduates, and Dropouts in the Labor Market, October 1977," *Monthly Labor Review*, June 1978, pp.44-45.

[24] Organization for Economic Cooperation and Development, *Trends in Labour Supply: Analytical Report* (Paris, OECD, Oct. 29, 1979, unpublished). See also Reubens, *The Youth Labor Force*, chap. 5.

[25] Unrecorded work refers to employment in jobs which are not reported to avoid taxes and other kinds of regulation or to employment in illegal activities. See appendix.

on an annual basis, the figure is well below the U.S. and Canadian proportions for students working in October. However, a 1974 national survey of 16-year-olds indicated a much higher degree of student work force activity. About half of the pupils in the final year of compulsory school reported that they had worked during the school term. Many of these jobs were delivery or babysitting jobs with brief hours.

Recent Swedish surveys show that in the last year of compulsory school about 20 percent of the students who did not proceed to the next level of education had worked at some time during the school year. A survey of Swedish students age 18 and 19 indicated that only about one-third had worked at any time during their upper secondary school years. Most of them worked only on weekends rather than during the school week.

German university students have increased their labor force participation greatly since the 1960's, but it is still far below the level of U.S. college students. In the mid-1970's, 20 to 25 percent of German university students worked consistently or frequently during the school year. In the United States, well over half of all college students participate in the labor force while in school. The October 1979 survey reveals that about 45 percent of full-time college students were in the labor force. Among part-time college students, the activity rate was about 90 percent.

There are several reasons why relatively few European and Japanese students work while in school. One factor concerns the academic demands of school which discourage part-time work. The rigors and pressures of the school years in Japan are well known. In that country, all educational institutions have social prestige rankings and the quality of the job and firm entered by young workers is highly dependent on the particular schools attended. Thus, good academic records are very important and their pursuit leaves little time to work at part-time jobs. Studies in several countries have shown that part-time jobs during the school week have an unfavorable effect on school work; thus student work activity is generally discouraged.[26] In France, Germany, and Great Britain, students tend to look for casual employment rather than a regular part-time job. This is because only at certain times of the year do academic obligations allow some leisure; during the examination period students must devote themselves entirely to their studies. Given the fact that the German labor force surveys are taken only in April of each year and the French surveys only in April and October, the full extent of seeking such casual employment most likely does not show up in the unemployment figures for these countries. Enrollment in an American or Canadian college or university, on the other hand, is much more compatible with part-time employment, so a larger proportion of students enrolled in colleges and universities are in the labor market.

Financial factors are also significant in the international differences in student labor force behavior. In European countries, student bodies are drawn very disproportionately from the upper income classes. Furthermore, governments abroad often provide financial stipends to a large proportion of students which make it less necessary for them to work while in school. In Sweden, a system of scholarships and loans is available for the benefit of some 70 percent of the 60,000 students attending the various universities. To be eligible, a student must not have any gainful employment, or at least the remuneration must not exceed a certain limit beyond which the amount of the loan granted will be reduced. The same policy is followed in the United Kingdom. Grants are awarded to 300,000–350,000 students and in principle allow them to do without gainful employment; working part time is not allowed. On the other hand, students in both countries are not discouraged from seeking casual jobs during the long school vacations.

Every country provides some form of financial aid to students to help them meet the costs of higher education. The extent to which students receive aid from public funds or are dependent upon their own part-time earnings or on contributions from their parents varies considerably from country to country, according to an OECD study.[27] In 1974–75, the number of students receiving financial aid ranged from 70 to 90 percent in Sweden and the United Kingdom to about 50 percent in Germany and Australia and 25 percent or less in Canada, Japan, and the United States.

Fees in universities and other institutions have been largely abolished in Australia, France, Germany, and Sweden; in the United States, Canada, Japan, and Great Britain fees are still charged, although the level varies considerably. Tuition charges in Japan and the United States are an important source of income for private universities and colleges.

A straightforward comparison of the value of student grants or loans would be misleading since the costs of education vary so much among countries and among different universities. However, there is a striking difference between Sweden, where tuition is free and students receive a combined loan and grant of $2,000 to $3,000 a year toward their living expenses, and the United States, where students receive loans which must cover tuition as well as living costs, and which average under $1,000 a year.

Also, all industrial countries except the United States have "family allowance" systems which provide continued payments for students enrolled in school or college to age 21 or more. In the United States, tax de-

[26] Reubens, *The Youth Labor Force*, chap. 5.

[27] "Financial Aid for Students," *OECD Observer*, November/December 1976, pp. 30–32.

ductions for the families of dependent students provide a form of "family allowance." In addition, welfare payments are available for young people continuing in school, but they are often limited to those from broken homes.

Another factor in the degree of student workseeking from country to country is the supply of part-time jobs. Canada and the United States have a larger part-time employment sector than most other countries. Almost 1 out of 3 employed American youths (under age 25) holds a part-time job; in Canada, the proportion is 1 out of 4. In Europe, the figures are much lower. For example, only about 1 in 20 French youths has a part-time job. In 1975, 14.3 percent of total U.S. employment was in voluntary part-time jobs. In Canada, the proportion was 10.6 percent. Unpublished data from the 1975 European Community labor force survey indicate that only 4.5 percent of total employment in Italy was in regular part-time jobs.[28] For France, the proportion was 6.5 percent, and Germany, 8.9 percent. The United Kingdom had a larger proportion than any of the other countries, with 16.6 percent of its workers in part-time jobs. However, such jobs are predominantly taken by British women rather than youth. The Commission of the European Communities has noted that an unfulfilled demand for part-time work exists in the European countries among various groups of workers, particularly women.[29]

A further reason why the United States and Canada have a proportionately larger student labor force is that these countries have systems of mass higher education; thus there are many more young people who stay in post-compulsory schooling. The other countries have much smaller higher educational systems, and entry into secondary schools is generally restricted. In Sweden, for example, of the students who applied for admission to secondary school in the autumn of 1976, 78 percent were admitted. This contrasts with the unrestricted entry into secondary schools in North America. In 1970 (or the nearest year available), about 94 percent of all 16-year-olds were in school in the United States, 87 percent in Canada, 80 percent in Japan, 74 percent in Sweden, 42 percent in Great Britain, and only slightly over 30 percent in Italy and Germany (table 8). For 19-year-olds, the contrast was even greater. Thus, outside North America, a much higher proportion of teenagers are out of school and seeking or working at full-time, year-round jobs.

Italy has had special labor market problems associated with new university graduates. The number of students in Italian universities rose by over 50 percent in the years 1969 to 1972 alone, while the university-age population grew by only 3 percent. The rise in the entry rate was facilitated by the university reform of 1969 which opened all university departments to any successful secondary school graduate. The claim has been made in Italy that during recent years one important function of the university has been to provide a form of "parking" for the young in search of employment. Thus unemployment of secondary school leavers is temporarily delayed, only to be faced later on. The Italian educational system is reportedly overcrowded and antiquated, producing graduates prepared for careers for which there is no demand, and underproducing in the areas where demand exists.[30] Many youthful unemployed Italians are graduates from the terribly overcrowded universities which have failed to cope with the large influx of students since 1969. Many college students face a lengthy period of unemployment upon graduation.

Table 8. Percent of teenagers in educational institutions, all levels, selected years, 1966–72

Country	Year	Age			
		16	17	18	19
United States	1970	94.1	86.9	58.1	45.4
Australia	1972	54.9	36.3	18.0	10.7
Canada	1970	87.1	69.0	45.5	30.3
France	1970	62.6	45.5	30.6	21.8
Germany	1969	31.3	19.2	12.9	9.6
Great Britain	1970	41.6	25.9	17.4	13.7
Italy	1966	33.6	27.4	19.7	11.0
Japan	1970	80.0	74.8	29.5	22.0
Sweden	1972	73.7	60.7	40.7	24.0

Source: Organization for Economic Cooperation and Development, *Educational Statistics Yearbook, Vol. II, Country Tables* (Paris, OECD, 1975).

Apprenticeship and formal training

European educational institutions have tended to put the masses of youth into training for narrow vocational specialties while American youth are still continuing general education. The European system's emphasis on apprenticeship and vocational training tends to put young people into stable work-training relationships that discourage mobility. The frequent job changes and spells of unemployment characteristic of young persons in the United States are not found to as great an extent abroad.[31]

In most European countries, apprenticeship and vocational eduation are widespread. Vocational education programs predominate in France and Sweden; apprenticeship training is the principal type of industrial train-

[28] The European Community data relate to persons in regular part-time full-year jobs and do not correspond exactly to the U.S. data on voluntary part-time work. The EC figures exclude persons working at intermittent part-time jobs whereas such persons are included in the U.S. figures.

[29] "EEC Major Initiative on Work-Sharing," *European Industrial Relations Review*, March 1978, p. 24.

[30] International Labour Office, *Some Growing Employment Problems in Europe* (Geneva, ILO, 1974), pp. 46–48.

[31] Beatrice G. Reubens, "Foreign Experience," in *Report of Congressional Budget Office Conference on the Teenage Unemployment Problem: What Are the Options?* (Washington, Government Printing Office, Oct. 14, 1976), p. 55.

ing for youths in Great Britain and Germany, and is widely used elsewhere. In Japan, training within enterprises usually marks the beginning of lifelong employment. Apprenticeship programs provide both a smooth transition from school to work and employment security for young workers. Apprentices are not immune to unemployment, but they have shown greater employment stability than other youth.[32] The key to the German performance in keeping youth unemployment comparatively low has been that country's strong apprenticeship system. For a large proportion of German young people (about 45 percent of those age 15 to 18), this training constitutes the upper secondary level of school. The youths receive compensation from the firm, and the apprenticeship period usually lasts for 3 years. Italy, on the other hand, does not have a well-developed system of vocational training institutions which serve as an alternative to universities. Government-sponsored training programs in Italy do not prove attractive to the young, as there is doubt that they will lead to a job.[33]

Table 9 shows an international comparison of the extent of apprenticeship in 1974 and 1977. Germany led by far, both in absolute number of apprentices and in the ratio of apprentices to civilian employment—over 5 percent. Italy ranked second, with about 3.5 percent of civilian employment in apprenticeships, but this high ratio should be discounted both because training in many cases is unsatisfactory or nonexistent and because dropout rates are extremely high.[34] Australia and Great Britain had about 2 percent of civilian employment in apprenticeships, and France and Canada had under 1 percent. The United States, with 0.3 percent, had a lower ratio than any other country except Sweden. Sweden has a small, legally recognized apprenticeship sector, subsidized by the government. An unknown number of unsubsidized apprentices are trained through company programs, and these are not included in the data on table 9.

A study of the high school class of 1972 in the United States indicated that only 1.9 percent planned to enroll in apprenticeship or on-the-job training programs and that 10.8 percent planned to take vocational or technical training at specialized schools or junior colleges.[35] In Germany, about 70 percent of secondary school leavers enter industrial training, usually apprenticeship.[36] Almost one-quarter of the British school leavers entering employment in 1972 went into apprenticeships.[37] Apprenticeship in North America has never acquired the scope that it has in Europe.[38] A young person in North America can attain skilled status without completing apprenticeship training. This is not the case in Europe. Furthermore, apprentices in North America tend to be older than their European counterparts. The average age of a Canadian apprentice is 23 and an American, 25. By these ages many Europeans are already fully qualified journeymen, having begun their apprenticeships at age 16 or 17. The use of veterans' benefits to fund apprenticeships in the United States has been a significant factor in the higher average age of apprentices.

In response to rapid increases in youth unemployment, several foreign countries instituted government subsidies to firms who took on new apprentices. Much of the governmental financial aid to apprenticeship dates

[32] *Ibid.*, p. 56.

[33] "Young on the Dole," *The Economist*, June 11, 1977, p. 89.

[34] Beatrice G. Reubens, *Apprenticeship in Foreign Countries*, R and D Monograph 77 (U. S. Department of Labor, Employment and Training Administation, 1980), p. 11.

[35] *National Longitudinal Study of the High School Class of 1972. Data File Users Manual* (Department of Health, Education, and Welfare, National Center for Education Statistics, July 1976).

[36] Herman Satedag and Hermine Kraft, "Educational and Occupational Outlook of Youths Toward the End of the Ninth School Year," (English summary) *Mitteilungen aus der Arbeitsmarkt-und Berufsforschung*, No. 2, 1979, p. 241.

[37] *Unqualified, Untrained, and Unemployed*, p. 26.

[38] Reubens, *Apprenticeship*, pp. 8–10.

Table 9. Number of apprentices and percent of total civilian employment, 1974 and 1977
(Numbers in thousands)

Country	1974			1977		
	Number of apprentices	Civilian employment	Apprentices as percent of civilian employment	Number of apprentices	Civilian employment	Apprentices as percent of civilian employment
United States	291.0	85,936	0.34	262.6	90,549	0.29
Canada	69.4	9,137	.76	96.8	9,754	.99
Australia	131.4	5,736	2.29	123.2	6,000	2.05
France	153.9	21,096	.73	194.4	20,962	.93
Germany	1,330.8	25,689	5.18	1,397.4	24,511	5.70
Great Britain	462.9	24,767	1.87	(1)	24,550	(1)
Italy	674.4	18,715	3.60	678.5	19,847	3.42
Sweden	[2]0.9	3,962	.02	[2]1.2	4,099	.03

[1]Not available.

[2]Number designated to receive government subsidies under 1959 law on apprentices. Unknown number of unsubsidized apprentices would raise Swedish total.

Source: *Apprenticeship in Foreign Countries*, R & D Monograph 77 (U.S. Department of Labor, Employment and Training Administration, 1980), p. 12.

from 1975 or later. Germany offered tax cuts and other subsidies to employers to increase their hiring of apprentices and also introduced a financial penalty for not doing so. A law passed in September 1976 contained the threat of a payroll tax of up to 0.25 percent which would be levied on employers in any year that the total supply of apprenticeship places was not at least 12.5 percent above the total number of young people seeking places.[39] The tax has not yet been applied because the employer response has been judged satisfactory, although regional and occupational imbalances persist. New apprenticeship contracts in Germany rose markedly from 1976 through 1979, following several years of little change. However, there were still a number of unsatisfied applicants for apprenticeship places—20,200 in 1979.

Great Britain has made use of several financial incentives to increase the number of apprentices both over the business cycle and in the longer term. For instance, the British government offers grants to firms which agree to complete the training of an apprentice who has been laid off before the final 6 months of training.[40] Since January 1977, the Australian government has underwritten a portion of the costs of apprenticeship programs. In France, almost 104,000 apprentices were subsidized between July 1978 and April 1979, with the subsidy period to end in December 1979. In addition, employers were permitted to exclude apprentices from employment in calculating certain tax liabilities.

Guidance and counseling

The apprenticeship system is one institution which helps smooth the transition from school to work. In addition, several European countries and Japan have developed strong systems of services for youth which help ease their movement into the labor market after completing school. These services include extensive information, guidance, placement, induction, and follow-up activities. According to one expert, the countries that seem to have the most effective transition services are Germany, Japan, and Sweden.[41] These countries offer a comprehensive set of services which are conducive to the prearrangement of jobs, so that there is little initial unemployment for a majority of school leavers. Of course, a favorable economic climate also encourages prearrangement. Without jobs, the best guidance and counseling programs would be futile.

The public employment service in Japan reportedly has an extensive role in the youth labor market.[42] It conducts guidance programs and provides information to the education authorities, who in turn give vocational orientation in the schools. The employment service makes estimates of the number of school leavers who will be seeking jobs each March. It then informs employers of the numbers from various educational levels likely to apply for jobs, collects job offers from employers, and escorts students in groups to recruiting employers. In normal economic conditions, most Japanese school leavers have prearranged jobs before school ends. There is also an extensive post-employment guidance and vocational adjustment system conducted by the employment service. Several unusual factors allow the Japanese system to work as well as it does: The chronic shortage of young workers, the high value placed on young workers by hiring firms, and a tradition of conformity among employers. All have allowed the public employment service to acquire a high degree of control over the placement of youths in their first jobs. Further, the timing of the end of the school year in Japan—school term ends in the spring—permits jobs to be started at once, with no long summer break as in continental Europe, where the closing down of large portions of the economy during July and August induces many young people to delay their permanent job-search for several months, relying on temporary vacation jobs even after they have left school for good.

Germany's highly centralized guidance program is directed by the chief labor market agency, the Federal Employment Institute. The Institute possesses full powers over occupational guidance and placement; German law bans private employment agencies, and schools are forbidden to make job placements. The Institute's personnel can enter schools, obtain pupil records, interview students, and conduct guidance activities in classrooms. Under this system, prearrangement of jobs or apprenticeship is common.

Both Sweden's school system and its labor market authorities have long emphasized vocational counseling and guidance. In recent years, such services have expanded and a new transition system was introduced in 1973—the SYO system (Education and Work Orientation System). The SYO provides for coordination and cooperation between the education and labor market authorities. Full-time vocational counselors are employed in all educational institutions. Counseling begins at about age 13 and is supplemented by practical work orientation. In the eighth grade, a week is allocated for group visits to factories and offices, while in the ninth (the last grade of compulsory school), pupils spend 2 weeks in various work places. Beginning in 1977, pupils in ninth grade started to do much more actual work in firms—from 6 to 10 weeks. One of the distinctive features of the SYO system is the emphasis on the needs of disadvantaged youth and special provision for follow-up of such persons throughout their years of schooling.

[39] *Ibid.*, p. 58.
[40] *Ibid.*, p. 57.
[41] Beatrice G. Reubens, *From Learning to Earning: A Transnational Comparison of Transition Services*, R and D Monograph 63 (U.S. Department of Labor, Employment and Training Administation, 1979), pp. 11-14; also see "Foreign and American Experience," p. 291.
[42] Reubens, *From Learning to Earning*, p. 13.

The Swedish system is predicated on good relations between a strong central government and local education authorities who accept direction and are responsive to suggestions.

Great Britain, unlike the three countries discussed above which integrate youth and adult services, has a separate, nationwide transition service for youth. Special juvenile employment bureaus, called Careers Offices, operate independently from the adult placement and guidance services. Staff members of the Careers Offices interview and give guidance to almost all school leavers. During the 1960's, they placed about one-third of all youths in their first jobs. Local studies in Great Britain in the 1960's and 1970's, under varying economic conditions, have shown that 40 to 50 percent of early school leavers (that is, 15- or 16-year-olds) had prearranged first jobs.[43]

The United States, Canada, and Italy rely on their educational institutions as the principal agency for transition services. Because of this, these countries have had difficulty in providing a comprehensive, integrated transition program.[44] One researcher has concluded that an array of countries according to the difficulty of the transition from school to work might place the United States and Italy at the top.[45] There are fewer prearranged jobs and more unemployment among new entrants in Italy and the United States than in the European countries discussed above and in Japan. It has been said that few American students are exposed to occupational or labor market information and that many counselors and teachers suffer from the same lack of knowledge.[46] A 1975 study of 32,000 students in 32 States concluded: "The breadth of evidence suggests that a substantial number of students have had little involvement with career planning activities at a time when major career-related decisions are becoming imminent."[47]

The value of transitional services to teenagers has been documented in the United States by the National Longitudinal Surveys. Male teenagers who received above-average labor market information through their high schools, plus work experience, had markedly higher earnings and occupational status when they became young adults than did those without such school-to-work transitional experiences. A high level of labor market knowledge alone was also positively correlated with earnings and occupational status.[48]

The goals and organizational patterns of the transition services in the various countries are influenced by the philosophy and tradition of each nation's educational establishment. Countries which have sharp class divisions and limited numbers in education beyond compulsory school have a greater tendency to establish comprehensive transition services than countries which stress access to education and upward mobility such as the United States and Canada. European countries seem to prefer to structure the early years of work by such devices as apprenticeship systems; Japan accomplishes a similar effect through lifetime contracts. While these devices reduce the level of frictional unemployment, they also reduce mobility and possibilities for career changes in later life.

Youth minimum wage

Legislated wage differentials based on the worker's youth alone are used on a very limited basis in the United States. The Fair Labor Standards Act contains provisions for subminimum wages for students and learners, but these provisions have not been used to any significant extent.

In contrast, differentials between youth and adult wages are common in Western Europe, Canada, and Japan. Some countries have minimum wage laws that provide for lower minimums for teenagers. Others have collective bargaining procedures that can result in differentially lower wages for young workers. Still other countries use both mechanisms.[49]

Under collective bargaining agreements in Great Britain, youth enter employment at about 30 percent of adult earnings and, by steps, reach adult wages normally at age 21 for men and 18 for women. In France, with both a statutory minimum and minimum rates set under collective bargaining, youth enter employment at about 70 percent of the adult minimum at age 16 and reach the adult rate at age 18. Youth wage rate schemes are also used in Canada, Germany, and Japan. In Japan, where wages are based largely on age or seniority throughout working life, young workers start at about one-third the adult rate.

Canadian youth minimum wages have an upper age limit of 17 or 18 since adult rates begin at 18. The major effect of the youth differential appears to be on student workers because most 17- or 18-year-olds are still in school in Canada. The differential between youth and adult minimum wages is small, ranging from 5 to

[43] *Ibid.*, p. 78.

[44] *Ibid.*, p. 9.

[45] Reubens, "Foreign and American Experience," p. 283.

[46] Ben Burdetsky, "Troubled Transition: From School to Work," *Worklife*, November 1976, p. 2. See also Seymour L. Wolfbein, "Informational and Counselor Needs in the Transition Process," in *From School to Work*, p. 193.

[47] R. J. Noeth, J. D. Roth, and D. J. Prediger, "Student Career Development: Where Do We Stand?", *Vocational Guidance Quarterly*, March 1975, p. 213.

[48] Andrew I. Kohen and others, *Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Young Men*, Vol. 6, R and D Monograph 16 (U.S. Department of Labor, Employment and Training Administration, 1977), pp. 192–93. See also Herbert S. Parnes and Andrew I. Kohen, "Labor Market Experience of Noncollege Youth: A Longitudinal Analysis," in *From School to Work*, pp. 75–78.

[49] *Youth Unemployment and Minimum Wages*, Bulletin 1657 (Bureau of Labor Statistics, 1970), chap. 6.

13 percent, depending on the province. When British Columbia widened the youth differential, making young people more attractive to employers, an increase in employment of those under 18 occurred.[50] However, it is not known whether the increase was at the expense of older workers. Surveys among provincial officials at the end of the 1960's brought out two opposing views: Some officials suggested that the youth minimum wage was a positive factor in introducing young people to working life; others believed that the differential displaced older workers and that some youth were laid off once they attained the adult rate.[51]

It has been argued that, abroad, the relatively low wage for teenagers compared to adults tends to facilitate the employment of youth. One 1970 study concluded: "The evidence from abroad indicates that low wages for youth are an inducement to employers to seek young workers eagerly. The relatively low youth unemployment rates abroad . . . are partially a reflection of the fact of low wages for youth."[52]

This study pointed out that low wages for youth abroad cannot be separated from the extensive apprenticeship programs in such countries as Germany and Great Britain and from the lifetime employment system in Japan under which high wages in later years with the firm offset the low youth wages. Also, experience in foreign countries having institutions different from those in the United States has a limited application to American teenagers, who are much more likely to be looking for a part-time job than a permanent job.

Recent evidence indicates that the relative costs of employing young workers have changed abroad. Despite youth minimums, the actual postwar trend in earnings has been more in favor of youth than other age groups. Thus, there has been a narrowing of the actual wage differential between youth and adult workers. For instance, a recent British study reveals that pay for young people has risen considerably in relation to that of adults. Average hourly earnings of male manual workers under 21 as a percent of adult male earnings were 45 percent in 1948; 48 percent in 1960; 52 percent in 1970; and 62 percent in 1977.[53] This increase in relative pay reflects a number of influences, including a trend toward payment of adult wage rates at ages below 21 and the 1972 raising of the school-leaving age which removed 15-year-olds from the labor market. Japanese data also indicate a rise in youth wages relative to adults. Between 1965 and 1975, nominal cash earnings (excluding bonuses and overtime allowances) for persons under age 25 rose 463 percent, while earnings for persons 25 or over increased 408 percent.[54] An Australian study also suggests that increased youth wages since the early 1970's have increased the relative costs of hiring the young.[55] Sweden reports a growing reluctance on the part of employers to hire young workers because they are already at a cost disadvantage if training and induction costs are included.[56] German compensation for apprentices has risen more sharply than overall average wages.

A detailed comparison of changes in the earnings of manual workers in the original member countries of the European Economic Community showed that youth wages increased relative to adult wages in all countries between 1966 and 1972.[57] The smallest changes occurred in Italy and Germany where youth-adult wage differentials were lowest in 1966. The greatest changes occurred in Belgium and France. No comparable data are as yet available to show whether this trend has persisted since 1972.

In the United States, on the other hand, there has been a decline in youth wages relative to those of adults. Data on median weekly earnings for out-of-school white males age 18 to 24 relative to all white males age 25 and over show a decline over the period 1967 to 1977 on the order of 10 percentage points. Several studies attribute much of the decline in relative earnings of the young to the enormous influx of the baby-boom generation onto the U.S. labor market.[58] Because of the intense competition for jobs, relative wages of youths had to decline in order to generate the large increase in teenage employment which occurred.

Minority group unemployment

The United States has had exceptionally high levels of unemployment for black youths compared with white youths. In 1978, black teenagers had an unemployment rate about two and one-half times that for white teenagers. Furthermore, the disparity between the unemployment experience of black and white youth has been

[50] Beatrice G. Reubens, "Review of Foreign Experience," in Isabel V. Sawhill and Bernard E. Anderson, eds., *Youth Employment and Public Policy* (Englewood Cliffs, N.J., Prentice Hall, 1980), pp. 122-23.

[51] *Youth Unemployment and Minimum Wages*, pp. 145–46.

[52] Thomas W. Gavett, "Youth Unemployment and Minimum Wages," *Monthly Labor Review*, March 1970, p. 9.

[53] "The Young and Out of Work," *Department of Employment Gazette*, August 1978, p. 908.

[54] Organization for Economic Cooperation and Development, *Youth Unemployment: A Report on the High Level Conference 15–16 December, 1977*, Vol. 1 (Paris, OECD, 1978), p. 115.

[55] Organization for Economic Cooperation and Development, *Australia: Transition from School to Work or Further Study*, OECD Reviews of National Policies for Education (Paris, OECD, 1977), p. 288. See also P. Stricker and P. Sheehan, "Youth Unemployment in Australia: A Survey," *Australian Economic Review*, First Quarter 1978, p. 24.

[56] Reubens, "Foreign and American Experience," p. 288.

[57] David Marsden, *A Study of Changes in the Wage Structure of Manual Workers in Industry in Six Community Countries Since 1966* (University of Sussex, Sussex European Research Centre, July 1979).

[58] Richard B. Freeman, "Why is There a Youth Labor Market Problem?," and Michael L. Wachter, "The Dimensions and Complexities of the Youth Unemployment Problem," in *Youth Employment and Public Policy*, pp. 25 and 45–46, respectively.

worsening since the mid-1960's.[59] The special problems of American black and other minority youths in the labor market are unmatched in Europe, Australia, or Japan, and are a factor helping to explain the higher youth unemployment in the United States compared with other countries.

Other countries have had minority youth employment problems, though religious and cultural rather than racial differences may be the main cause. Countries which admitted large numbers of foreign workers on a temporary basis during the labor-short 1960's, expecting that they would soon return home, found instead that many settled in the host country, married locally, or brought wives and children from home. This generation of children remained in the new country and faced a less favorable economic climate than their parents. They also brought more educational and social disadvantages to the labor market than the children of native-born parents.[60]

Unemployment rates among minority youth abroad are much higher than the rates for the youth age group as a whole. However, the relative size of the minority groups in other countries is not as large as in the United States.

A comparison of statistics for Sweden and the United States provides some insight into the differences in the extent of minority unemployment. Children of foreign workers in Sweden, who frequently are more poorly educated, and non-Swedish speaking, have an unemployment rate much higher than native Swedish youth. In the second quarter of 1979, immigrant teenagers had an unemployment rate of 12.1 percent while Swedish teenagers had a rate of 7.5 percent. There was also a wide difference between the unemployment rates for young adults, with foreign-born 20- to 24-year- olds having a jobless rate of 6.4 percent and native-born Swedes having a 3.1-percent rate. Certain neighborhoods in Stockholm which have large concentrations of immigrants report teenage unemployment rates in the 30 to 40 percent range. Sweden's social welfare system requires that employers allow non-Swedish-speaking workers to receive 240 hours of Swedish language training on company time, making employers reluctant to hire non-native labor.

Foreign-born teenagers accounted for 8.8 percent of total teenage unemployment and 5.7 percent of the teenage labor force in Sweden during the second quarter of 1979. In the United States, blacks and other minorities accounted for 24 percent of total teenage unemployment and 11 percent of the labor force in 1978. The contrast between the two nations is also marked for young adults. Immigrants made up 8.3 percent of the young adults unemployed in Sweden and 6.4 percent of the labor force. The corresponding figures for U.S. blacks were 29 percent and 14 percent, respectively.

Higher general levels of unemployment in Great Britain during the 1970's have had an adverse impact on young people from West Indian and Asian minorities. While 8.1 percent of all male teenagers were unemployed in Great Britain according to the 1971 census, 16.2 percent of those of West Indian origin were unemployed. Unemployment among 16- and 17-year-old minority youth trebled between 1973 and 1977, a rise greatly out of proportion to the number of minority youth.[61] A special survey conducted in 1977–78 indicated unemployment rates of over 11 percent for those of minority ethnic origin born in the United Kingdom and over 7 percent for those minorities born abroad compared to 4 to 6 percent for those of white ethnic origin.[62] This survey took into account both the registered and unregistered unemployed. It was found that young persons of minority origin were less likely to register as unemployed than older persons in minority groups. Even in periods of relatively low unemployment, school leavers from minority communities have found it difficult to get the jobs to which they aspired. The problem had become so acute that the British passed the Race Relations Act of 1976, making discrimination on the grounds of race, color, or nationality unlawful in employment, education, and other areas of life.[63] Yet, in terms of total unemployment, the problem of minorities in Great Britain is much smaller than in the United States. Unemployment of persons born in, or whose parents were born in, the Asian countries of the Commonwealth and the West Indies accounted for 4.4 percent of total unemployment in 1977–78.[64] No separate data were available for youth. In the United States, minority group unemployment amounts to almost one-fourth of total unemployment.

Other factors

Other influences on youth unemployment trends include the impact of increased competition from married women and illegal aliens for the jobs which youths normally seek. The OECD has suggested that competition from adult women has been important in decreas-

[59] See Norman Bowers, "Young and Marginal: An Overview of Youth Employment," *Monthly Labor Review*, October 1979, pages 5–7; and Curtis L. Gilroy, "Black and White Unemployment: The Dynamics of the Differential," *Monthly Labor Review*, February 1974, pp. 38–47.

[60] Reubens, "Review of Foreign Experience," p. 118–19.

[61] Alan Pike, "The Painful Path from Youth to Adulthood," *The Financial Times*, July 29, 1977.

[62] Ann Barber, "Ethnic Origin and the Labor Force," *Department of Employment Gazette*, August 1980, p. 841.

[63] "Racial Discrimination at Work," *Department of Employment Gazette*, October 1978, pp. 1185-87.

[64] Barber, "Ethnic Origin," p. 843, table 4.

ing job opportunities for youth.[65] In recent years, the number of women coming into the labor market has risen substantially in a number of countries (United States, Canada, Australia, Great Britain, Sweden). British surveys of employers who had recently hired teenagers indicate that, in about 40 percent of the jobs, women were considered in competition with young people. If applicants of similar qualifications were available, 42 percent of the employers had no preference between women and teenagers, but 40 percent did prefer women.[66] Similar indications that mature women may be taking jobs that might otherwise have gone to young people, especially girls, have been noted in the other countries with rising female labor force participation.[67]

Thorough analysis of the competition of illegal aliens for jobs in the United States is impossible because of the lack of data, but it is generally assumed that they are employed largely in the same types of unskilled and service occupations which provide part-time jobs for youth. As for foreign workers in Europe, they were initially hired during a period when there was a shortage of native-born workers, including youth, but there is little doubt that many who have not returned to their country of origin now hold jobs that might otherwise be taken by young people.

Conclusion

Certain countries, such as Japan and Germany throughout the past two decades and Great Britain in the 1960's, have experienced relatively low youth unemployment both in terms of absolute levels and in narrow differentials with adult rates. Others, such as the United States, Canada, and Italy for many years, and France and Australia more recently, have had very high rates of youth unemployment. Sweden's youth unemployment rates have risen sharply, but they remain moderate by international standards.

Cross-country differences in youth unemployment reflect differences in economic growth, demographic factors, systems of education and training, and various other institutional arrangements. Economic growth is certainly a crucial factor. High growth rates during the 1960's in Western Europe and Japan created tight labor market conditions—if not outright labor shortages—and youthful jobseekers benefited. Growth was not as rapid in the United States, and youth unemployment remained high. The 1974–75 recession had a large impact on youth. Young people are particularly vulnerable during downturns: Employers do not hire new entrants as freely as in upswings and young workers, the most recently hired, are the first to be dismissed.

Several systematic differences among the countries have emerged from this study which help to explain the wide international differences in youth unemployment. Characteristics often associated with low youth unemployment include a declining trend in the youth work force, no sizable student work force, stress on apprenticeship and prearrangement of first jobs, and relatively less emphasis on open options and job mobility. In Japan, the conditions supporting low youth unemployment are especially strong. Labor markets have been unusually tight and youth have been in short supply. Students rarely work while in school and tend to prearrange their jobs before leaving school; they enter lifelong employment with one firm. Young people are looked on favorably by employers who are willing to train them because of the tight labor market, low wages of new entrants, and the low rate of jobchanging among workers in Japan. If firms could not count on the long tenure of workers, they would probably be less willing to invest in the training of youth. Further, if Japanese youth could not count on job security, they might be less willing to accept low initial wages. In Germany, the forces for low youth unemployment have been similar to those in Japan, although less strong. A key element in Germany has certainly been the apprenticeship system which channels a large proportion of young people into their first job.

Certain common characteristics can also be singled out for the high youth unemployment countries, particularly the United States and Canada. Both had a large bulge in the youth population and labor force in the 1960's through the mid-1970's which has contributed to high youth unemployment. Both countries have a large proportion of their youth both in school and in the labor force. When school vacation unemployment as well as in-school unemployment is considered, students in the U.S. labor force exert upward pressure on the annual youth jobless rate. Canadian in-school students have much lower unemployment rates than nonstudents, but the large seasonal influx of students into the labor force during the summer vacation period also contributes to high youth unemployment. Neither North American country has had a smooth system of transition from school to work. Both emphasize general education and extended schooling rather than early career decisions and early entry into full-time, year-round jobs. The early years of work in North America are not structured by such devices as apprenticeship systems or lifetime work contracts.

[65] Organization for Economic Cooperation and Development, *High Level Conference on Youth Unemployment, Item 4, Diagnosis* (Paris, OECD, Nov. 9, 1977, unpublished), p. 4. For a British analysis on this point, see David Freud, "A New Era for Women," *Financial Times*, June 28, 1978, p. 27.

[66] Reubens, "Review of Foreign Experience," p. 121.

[67] For a study of U.S. data, see James H. Grant and Daniel S. Hamermesh, "Do Employers Substitute Workers of Different Ages, Races and Sexes, and What Does this Imply for Labor Market Policy?" Paper prepared for National Commission for Employment Policy, October 1979.

Except for very high youth unemployment rates which have persisted for many years, Italy does not appear to have much in common with the United States and Canada. The Italian youth labor force has been declining and is a much smaller proportion of the total work force than in North America. But these factors have not been much help in Italy where youth jobless rates have been high and are rising still higher. Italy is a country where two-thirds of the unemployed are looking for their first job. The labor market has not been able to adjust to the greater equality of higher educational opportunities which came with university reform. Employment opportunities for college graduates have not kept pace with expanding educational opportunities. The lack of a well-developed apprenticeship and vocational training system also helps explain the high levels of unemployment for the younger age groups, as prearrangement of first jobs, noted in other countries, does not occur in Italy. Furthermore, the rigidity of Italian labor laws operates against the hiring of young people. Of course, the prevalence of illegal or unreported employment should be considered in any analysis of the Italian youth labor market (see appendix).

While certain countries have been able to keep youth unemployment rates relatively low, such rates have been rising in all countries in the 1970's. Some of the underlying conditions conducive to low youth unemployment began to erode in the 1970's. Economic growth dropped precipitously in 1974 and 1975 and moved upward slowly thereafter. At the same time, demographic factors were changing in several countries, and the number of young persons in the labor force began to increase after many years of decline. The turnaround in demographic trends during a period of slow growth contributed to higher youth unemployment. Another factor in a number of countries has been the strengthening of employment protection legislation to the point where it reportedly adversely affects youth job opportunities. Minority group unemployment, long a problem in the United States, began to increase elsewhere, especially in the young age groups. Indications are that students in Sweden and perhaps other countries as well were beginning to adopt the North American pattern of working at or seeking part-time jobs. Finally, the narrowing of actual wage differentials between youths and adults has put youth at a cost disadvantage. In short, during the 1970's, the conditions in other countries which had contributed to low youth unemployment in the past had begun to change in a way adverse to youth employment opportunities.

Technical Appendix

This appendix presents a discussion of some of the problems encountered in deriving comparative unemployment data by age group for the nine countries studied. A country-by-country description of the adjustments made, along with tables showing these adjustments, appears in a BLS bulletin.[1]

Six issues emerged as areas of particular concern with regard to international comparisons of youth unemployment: (1) the source of the data—that is, whether they are from labor force surveys or employment office registrations; (2) the lower age limit for the statistics; (3) the classification of students; (4) unrecorded labor force activity; (5) current availability for work; (6) the reference period for the statistics; and (7) data discontinuities. A separate statement concerning the Italian data, which could not be adjusted to U.S. concepts, appears at the end of this appendix.

Source of data

Of the nine countries studied, six, including the United States, obtain their official unemployment statistics from sample surveys of the population. The remaining countries—France, Germany, Great Britain—derive their official unemployment data from registrations at employment offices. However, the latter three countries also conduct periodic labor force surveys.

Labor force surveys generally provide a better basis for international unemployment comparisons than statistics on registrations. The use of survey data is even more crucial for international comparisons of youth unemployment. New entrants and reentrants into the labor market are enumerated as unemployed in labor force surveys if they are looking for work; however, they are underrepresented in registration statistics because they usually have no financial inducement to register. Generally, only persons who have been working and making social insurance payments for a specified period are eligible to collect unemployment benefits. Since young persons are often new entrants or reentrants, they have no insurance credits.

German data present a good example of the different results obtained from registration statistics and labor force surveys. In September 1970, German registration data indicated a teenage unemployment rate of 0.4 percent; teenagers constituted only 8 percent of total registered unemployment. German survey data for April 1970, a month similar to September 1970 in terms of overall unemployment, yielded a teenage unemployment rate of 1.4 percent, with teenagers accounting for 22 percent of total survey unemployment (adjusted to U.S. concepts). An important factor affecting the German data is that only the sample survey classifies persons looking for an apprenticeship as unemployed. Since employment offices do not register apprentices, they do not appear in the registration figures.

Trends can also vary greatly depending on whether registration or survey statistics are used. German registration statistics show a huge increase in teenage unemployment between September 1970 and September 1976—almost 1500 percent. Survey statistics indicate an increase of 281 percent. The reason for this is that during boom periods (e.g., 1970), young people may be unemployed for such short periods that they do not bother to register as unemployed. During a recessionary period, however, an increase in the duration of unemployment may induce young people to register as unemployed, with a consequent disproportionate increase in the unemployment figures for teenagers. Survey data, which depend on whether persons are actually seeking work rather than on their being registered, can be considered to show a more "real" trend in youth unemployment.

Regression analysis of British labor market statistics also indicates that registered youth unemployment moves with the economic cycle, but with greater amplitude.[2] As overall unemployment rises, relative youth unemployment worsens in the registration statistics. The British statistics were also affected by the relaxation of rules governing the time of leaving school made in 1976; those pupils who were eligible to leave school were allowed to do so beginning at the end of May and were thus able to register as unemployed in June and July, whereas they formerly left school in July and registered in August. This change considerably increased the number of school leavers covered in the July count of the registered unemployed. Counts of the British registered unemployed by age were made only in July up until

[1] *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, 1978), pp. 147–52.

[2] Organization for Economic Cooperation and Development, *High Level Conference on Youth Unemployment—Country Position Papers, United Kingdom* (Paris, OECD, Nov. 29, 1977, unpublished), p. 2.

1976, when counts were also made in January. Currently, the data by age have been extended to 4 months each year—January, April, July, and October.

Unfortunately, Great Britain's General Household Survey, instituted in 1971, is based on a very small sample which does not provide very reliable data on unemployment by age and does not show data separately for teenagers. The General Household Survey data are analyzed here along with registrations data for Great Britain. Both series of data leave something to be desired, but together they present some useful information on the extent of youth unemployment in Great Britain.

For all other countries, only labor force survey data are shown because they present the best internationally comparable data. In most instances, some adjustments have been made in the survey data for greater comparability with U.S. concepts. For example, military personnel have been excluded wherever they appear, since U.S. data relate to the civilian labor force. Adjustments have also been made to exclude unpaid family workers who worked less than 15 hours during the survey week.[3] As indicated below, some adjustments have also been made to exclude from the unemployed persons not currently available for work.

Lower age limit

The lower age limit for labor force statistics varies from country to country. The U.S. lower limit is 16; for the other countries it ranges from 14 to 16. Most countries begin to count young people in their labor force statistics at the age when compulsory schooling ends and the law allows full-time work to begin. In most countries, these ages are the same. However, in Italy the minimum school-leaving age is 14 and the legal age to start work is 15, but enforcement of the law is lax.

It should be noted that considerable differences can exist between statutory and actual school leaving ages. Although American youth can leave school at 16, most do stay on until age 17 or 18 when they complete high school. In Japan, although compulsory schooling ends at 15, over 85 percent of Japanese graduates from lower secondary school proceed to an upper secondary school which concludes at 18. On the other hand, British compulsory schooling ends at 16 and most youth still enter the work force at that age. Similarly, most youth in Germany enter the work force at age 15.

Instead of adjusting all the foreign data to the U.S. lower age limit of 16, the foreign age limits have been adapted to conform to the age at which compulsory schooling ends in each country. This was done because youths in several other countries typically leave school and enter the full-time work force at lower ages than in the United States. Adjustments to the lower age limits were necessary only for France and Germany. French data were adjusted to exclude 15-year-olds for all years shown, and to exclude 14-year-olds as well in 1963. The German data were adjusted to exclude 14-year-olds in all years. Both of these adjustments have a negligible impact on the data, except in the early 1960's when more of these very young people were in the labor force.

For the other countries, no adjustments were needed because labor force statistics already conformed to the age at which compulsory schooling ends. Thus, the data for Sweden cover 16-year-olds and over; for Canada, Australia, and Japan, 15-year-olds and over; and for Italy, 14-year-olds and over. Great Britain raised its school-leaving age from 15 to 16 in 1972, and British survey and registration data reflect this change.[4]

Italian data are available separately for 14-year-olds so that the effect of using a different age limit can be ascertained. Very few 14-year-olds were economically active in the 1970's in Italy. Only 5 percent of all 14-year-olds were in the labor force in 1975, compared with about 30 percent of all 15- to 19-year-olds. However, a rather large proportion of the 14-year-olds in the labor force were unemployed—39 percent. Including the 14-year-olds, the Italian teenage unemployment rate in 1975 was 16.8 percent; excluding them the teen rate was 16 percent. In 1970, the impact of excluding the 14-year-olds was greater. Including them, the jobless rate for teenagers was 12.3 percent; excluding them, the rate was 10.9 percent.

Students

The measurement of the labor market experience of young persons is complicated by the schooling option. American youth who combine school and work are treated the same as young persons in the full-time labor market. The U.S. National Commission on Employment and Unemployment Statistics debated whether the student and nonstudent labor forces should be given equal weight in labor force statistics. The Commission con-

[3] Unpaid family workers working less than 15 hours should be classified as unemployed if they are actively seeking work (under U.S. concepts). However, it was not possible to ascertain how many persons were in this category in the countries where unpaid family workers working less than 15 hours were excluded for comparability with U.S. concepts. Since the total numbers excluded were small, this problem would not have a significant impact on the comparability of the data.

[4] This change had an immediate effect on unemployment of school leavers in 1973 by reducing the number of young people leaving school. It has also had a longer term effect on registration statistics because 16-year-olds are eligible to claim means-tested supplementary benefits immediately after leaving school, whereas 15-year-olds were not eligible for these benefits. Thus, 15-year-old school leavers often did not register as unemployed and looked for jobs on their own. Now that young people must wait until age 16 to leave school, they are much more likely to register as unemployed since they are eligible to claim these supplementary benefits.

cluded that they should be treated equally, but that students should be explicity identified in the U.S. statistics each month rather than only in October, which is the current practice.[5]

In general, students who work in the reference week are classified as employed and those who are seeking work are classified as unemployed in the labor force surveys conducted by the countries covered here. Full-time students are explicitly excluded from the labor force only in the British survey. In surveys where detailed probing is not made into labor force status (Germany, Japan and, until recently, Canada and Italy), it is probable that a certain amount of student labor force activity has gone unreported. Students may simply have been identified as "going to school" with no probing into their employment or jobseeking activities. There is also some evidence that student employment is unreported for other reasons—see next section on unrecorded employment.

In registration statistics, jobseeking students would normally be even more underreported than other youths because seekers of part-time jobs are generally not counted in registration data, by definition. In labor force surveys, persons seeking part-time jobs are counted as unemployed if they meet the other criteria of the definition.

In Great Britain, the inclusion of students in the registration statistics became a controversial topic in the mid-1970's. Until that time, very few students were registered. Then, the British National Union of Students began to publicize among college students the advantages of registering as unemployed during school vacation periods. The Student Union pointed out that, although students are usually not eligible for unemployment benefits, they can claim supplementary benefits of approximately 7 pounds a week. A record number of 121,000 adult (age 18 and over) students were registered as of January 1976, 9 percent of total registered unemployment; this prompted British officials to examine their statistical treatment of students. The Department of Employment subsequently decided to exclude adult students from the official unemployment count on the grounds that they were not looking for permanent work but only for vacation jobs or a passport to supplementary benefits. In addition, a change in administrative regulations was made for the 1976-77 school year under which the financial incentive to register during the short vacation breaks at Christmas and Easter was taken away. Data are still collected and published on registered adult students, but they are not included in the official unemployment count for Great Britain.

In the British General Household Surveys, the basis for the British data adjusted to U.S. concepts, all full-time students are automatically classified as economically inactive. They are not asked whether they are working or seeking work. BLS has adjusted the survey data by adding the annual average number of registered adult students. These figures are quite small on an annual basis, and have diminished considerably in recent years because of the change in the incentive to register.

Beginning in December 1976, the Australian government decided to withhold unemployment benefits from school leavers for the duration of the summer vacation season. This policy has discouraged prompt unemployment registration by school leavers, thereby depressing the December, January, and February totals of registered unemployment. The comparative Australian data used in this article are from the labor force survey rather than registration statistics, and school leavers are included as unemployed in the survey if they are actively seeking work.

In the Canadian survey, full-time students seeking full-time work are automatically excluded from the unemployed during school term on the grounds that they are not currently available for work. Full-time students seeking part-time work are regarded as unemployed. During vacation periods, any student seeking work is counted as unemployed if the other criteria of the definition are met. The Canadian exclusion of full-time students seeking full-time work probably has no impact on the comparative unemployment rates.

In Sweden, full-time students are counted as unemployed only when seeking work during school holidays. During the school term, such students are automatically considered as not currently available for work. Part-time students seeking work would be counted as unemployed at any time, providing they meet the other specifications of the unemployment definition. Full-time students do not normally seek work during the school term in Sweden, although there are recent indications that this may be changing. At present, any student unemployment which does not show up in the Swedish figures is likely to be very small.

The measurement problems associated with students have only a small impact at present on the strict comparability of international youth unemployment rates. The pattern of working while in school which is widespread in the United States and Canada, and smaller but still significant in Australia, does not occur to any large extent in the Western European countries and Japan where students may seek work during school vacations, but rarely while in school.[6]

An OECD Working Party on Employment and Unemployment Statistics recently issued recommendations

[5] National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (Washington, Government Printing Office, 1979), pp. 89-90.

[6] Margaret S. Gordon, *Youth Education and Unemployment Problems: An International Prespective* (Berkeley, Carnegie Council on Policy Studies in Higher Education, 1979), p. 20.

for the amplification of existing ILO guidelines[7] for the compilation of labor force statistics. In view of the increasing tendency of students to seek part-time work, the Working Party recommended that OECD member countries collect data on such persons as a regular part of their labor force statistics programs.[8] Thus, better data may be forthcoming on this subject.

Unrecorded employment

In all societies, there is some degree of illegal or unrecorded labor force activity. This hidden economy includes people working in legal jobs which are not reported so that taxes or other kinds of regulations can be avoided. Also included are criminal activities such as the drug trade and illicit gambling. One estimate indicates that 5 percent of the Common Market's gross product moves through the hidden economy, outside the constraints of union contracts, minimum wages, and government regulations; an Internal Revenue Service preliminary estimate for the United States indicates a similar order of magnitude for the subterranean economy.[9]

Although labor statistics are obviously difficult to obtain on such unreported activities, a conclusion can be drawn that both types of unrecorded employment probably contain a disproportionate number of young people. Some recent studies on unrecorded employment in Italy [10] indicate that young people and especially students take unrecorded or illegal work so as to retain the advantages of student status for themselves or their families (for example, financial assistance, tax concessions, family allowances, entitlement to special benefits). One study by the Italian Center for Economic and Social Research estimated that there were 1.4 million clandestine workers aged between 14 and 29 in 1977, in addition to a recorded labor force in that age group of 6.6 million.[11] About 45 percent of the 1.4 million unrecorded workers were also students. This would amount to 16 percent of all Italian pupils and students, but this figure would be substantially less in any one month because it records the number of students who did any work during the year. Other studies for Italy have also arrived at large orders of magnitude for the hidden or unrecorded labor force.[12]

One youth labor market expert concludes that unrecorded employment "constitutes a somewhat larger segment of American and Italian youth than in most other countries, but it is probably not large enough except perhaps in Italy to invalidate the acceptance of the officially recorded youth labor force for comparative analysis."[13] Italy's highly restrictive labor legislation which practically bans dismissals, and its relatively high nonsalary labor costs, provide strong inducements for employers to conceal the employment of as many workers as possible. Italian workers, especially young persons and students, also have strong incentives to accept unofficial employment so as not to lose financial stipends and so as to be able to obtain informal work with flexible working hours rather than regular work contracts involving more rigid obligations.

One observer reports that, in Northern Europe, the hidden economy is more a craftsman's domain. In this way, painters, plumbers, dressmakers, and other kinds of service workers can add to their income and provide services otherwise hard to obtain quickly.[14] In the United States, studies have shown that the illegal economy is substantial, especially in inner-city areas.[15] Youths living with their parents and participating in illegal activities are unlikely to report them, if only to maintain eligibility for food stamps and other forms of welfare.

It is a good assumption that persons working in unrecorded or illegal jobs would be very reluctant to report them when interviewed for a labor force survey. Such persons would more likely respond that they are unemployed, not in the labor force, or simply going to school or keeping house. In cases of illegal employment, such as in U.S. inner-city areas, these persons often would not participate in labor force survey samples as they may not have an official address. Because of the large degree of unrecorded employment in Italy, there is likely to be a significant but unknown amount of overstatement in the Italian unemployment figures, particularly for young persons. The new Italian labor force survey, discussed later, has partially solved this problem. Italian statistical authorities sought to make interviewers keenly aware of the problem and asked them to act with considerable tact, but to persist in their questioning. A more probing style of questioning was

[7] International Labour Office, Eighth International Conference of Labour Statisticians, *Employment and Unemployment Statistics, Report IV* (Geneva, ILO, 1954).

[8] Organization for Economic Cooperation and Development, *Measuring Employment and Unemployment* (Paris, OECD, 1979).

[9] Both the Common Market and the IRS estimate are quoted in Martin Trow, "Reflections on Youth Problems and Policies in the United States," in Gordon, *Youth Education and Unemployment Problems*, pp. 139–40.

[10] P. Pettanati, *Illegal and Unrecorded Employment in Italy* (Paris, Organization for Economic Cooperation and Development, Feb. 16, 1979, unpublished) and G. Arangio-Ruiz, *The Experience of the Italian Central Bureau of Statistics in Investigating Non-Institutional Work* (Paris, Organization for Economic Cooperation and Development, Dec. 29, 1978, unpublished).

[11] L. Frey, "Il Lavoro Nero in Italia nel 1977," in *Tendenze dell' Occupazione* (Rome, Center for Economic and Social Research, June 1978).

[12] For example, see CENSIS, *L'Occupazione Occulta*, CENSIS Ricerca No. 2 (Rome, CENSIS, 1976).

[13] Beatrice G. Reubens, *The Youth Labor Force 1945–1995: A Cross-national Analysis* (Montclair, N. J., Allanheld, Osmun and Co., 1981), chap. 1.

[14] *Ibid.*

[15] For example, see S. L. Friedlander, *Unemployment in the Urban Core: An Analysis of Thirty Cities with Policy Recommendations* (New York, Praeger, 1972).

introduced, making it more likely that previously unrecorded employment and unemployment would be reported.

It should be noted that many unreported jobs are second jobs held by persons who have a reported, formal first job. In such cases, there would be no impact on the unemployment rate. However, in the case of young people, unreported jobs would often be the only job held. If these youth report in a labor force survey that they are without work and seeking a job, the survey would report artificially high unemployment rates for youth.

Current availability

In the United States, unemployed persons must be currently available to begin work (except for minor illness), and there is a test of availability in the survey questionnaire. Thus, students attending school in April and seeking work to begin in June when the school term ends would not be counted as unemployed in April because they are not available to begin work at that time. If students are still seeking work in June, they would be counted in that month's unemployed.[16] In the U.S. survey, the probing into current availability eliminates relatively more teenage students than other jobseekers from the unemployed count.

Canada and Australia follow the U.S. practice. In effect, Sweden does too. There is no question on current availability in the Swedish survey, but interviewers are instructed to probe into the availability of students and to exclude them from the unemployed during the school term. In principle, Japan and Italy require current availability in their definitions but do not have a specific question on this point in their surveys. The British survey does not require current availability; however, it regards all full-time students as economically inactive, so that current availability is not a problem. The average number of adult (age 18 or over) students who are registered for temporary employment during a vacation period has been added to the British unemployment figures in order to include student unemployment which is not covered by the survey. By definition, these students are currently available for work.

France and Germany recently instituted questions on current availability in their labor force surveys. France now publishes unemployment results on the basis of both national and international definitions. The data on the latter basis exclude from the unemployed persons who are not currently available for work.[17] Germany, however, does not use the replies to the current availability question to exclude anyone from the unemployed count. BLS has obtained unpublished data for Germany from their 1977 survey which indicate that those not currently available made up 15 percent of the unemployed overall, and 30 percent of the unemployed under the age of 20. Since the German labor force survey is taken only once a year, in April or May, and the end of the school year is in July, there are a large number of young people searching for work in the spring in anticipation of the end of the school term. BLS has used the 1977 data to make estimates for earlier years in order to exclude from the unemployed those not currently available to begin work. No adjustment was needed for the German data for the early 1960's because the survey was taken in April and the end of the school year was in March at that time.

Even though Japan and Italy do not have an explicit test of current availability, it seems unlikely that many persons who are not currently available for work are classified as unemployed in either country. The Japanese questionnaire is a self-enumeration—i.e., the labor force survey schedule is filled out by the respondent rather than by an interviewer. The instructions printed on the survey form clearly specify that a person classifying himself as unemployed must be "able to take up a job immediately after he finds a job." The Japanese school year ends in March, and youth unemployment characteristically reaches a peak during that month. For example, in 1979 teenage unemployment rose from 50,000 in February to 120,000 in March, then fell to 80,000 in April and remained in the 70,000–80,000 range the rest of the year. It is unlikely that many of the 120,000 unemployed teenagers in March were not currently available to begin work because the survey's reference period is the week ending on the last day of the month and most youth would be out of school by that time. Even if some of the 120,000 were not currently available and a more "normal" level of 80,000 unemployed were taken as an unemployment count for March, the annual average figure would be almost the same.

In Italy, the situation is somewhat less clear. The survey form is filled out by an enumerator. The form does contain a definition indicating that an unemployed person must be available for work if a job is offered. Whether this definition is followed explicitly depends upon the diligence of the enumerator in carrying out the definition. Here again, the timing of the survey militates against the inclusion of students as unemployed who are not available for work. The Italian school year ends in June, and the quarterly surveys are taken in January,

[16] Prior to 1967, the U.S. survey did not contain a test of current availability. Such a test was instituted in 1967 following the recommendations of the President's Committee to Appraise Employment and Unemployment Statistics. Teenage unemployment averaged 11.7 percent under the new survey questionnaire and 12.7 percent under the old questionnaire in 1967. This was mainly because of the availability test which eliminated many students from the unemployed in March, April, May, and June.

[17] In March 1977, 14.5 percent of the reported French unemployed were not currently available for work; in October 1977, the proportion was 6.4 percent. The higher March figure reflects the fact that students seeking summer jobs were included.

April, July, and October. The April survey conceivably could include some students who are not available until June, but the July survey would entail no such problem since all the students would be out of school by then.

Reference periods

The inherent instability of labor market behavior of young people makes data reference periods an important factor when making international comparisons. All countries generally have a sharp seasonal upswing in youth unemployment following the addition of school graduates and other students to the labor market at the end of the school year. If school holiday and vacation periods do not coincide with survey dates, much student jobseeking will not be recorded. On the other hand, when holidays do coincide or come shortly after the survey, the results will give an artificially high level of unemployment for students which is not an accurate measure on an annual average basis.

For the United States, Australia (since 1978), Canada, Japan, Sweden (since 1970), and Great Britain (since 1971), the annual labor force survey data used here are averages derived from monthly surveys. Australian data prior to 1978 and Swedish statistics prior to 1970 were collected on a quarterly basis. Annual averages for both countries represented the average of the 4 months, February, May, August, and November. December marks the end of the school year in Australia, and youth unemployment reaches a peak in the February survey. For 1978 and 1979, the average for the 4 months (February, May, August, and November) closely approximates the annual average. For example, the unemployment rate in 1978 for persons under 25 was 12.8 percent for the 4 months and 12.7 percent for the 12 months of the year.

Sweden's school year ends in June and youth unemployment is generally higher over the summer months than at other times. Unemployment rates for youth, whether calculated as 4-month or 12-month averages, are virtually the same.

Italian data for all years are collected quarterly, and annual averages represent the average for the months January, April, July, and October. Since Italy has never had a monthly survey, it is not possible to tell how well the data for these 4 months approximate the annual average.

The data for France and Germany are not annual or even quarterly averages. For France, data through 1976 are for March or April of each year. Beginning with 1977, data are also available for October.[18] The German data analyzed here relate to April or May of each year. Since school years end in July in both countries, workseeking during summer vacation is not covered in the March-May surveys.[19] Thus, the data relating to a spring month most likely understate youth unemployment for France or Germany when comparing them with annual data for other countries. For example, U.S. teenage unemployment rates for April are generally slightly lower than the annual average rate for teenagers. In 1977, teenage unemployment was 15.3 percent (not seasonally adjusted) in April and 16.1 percent for the year. Unemployment for all age groups was 5.8 percent both in April and on an annual basis. The October 1977 data for France indicate higher unemployment for persons under 25 than the March figures. Typically, French youth who graduate from high school in the summer do not start to look for work until September or October, so that higher October figures are the norm.

British statistics for 1961 are from the April population census. Survey statistics, available from 1971 onward, are annual averages. Registered unemployed data by age are available only for July in most years; since 1976, data for January have also been available and, since 1978, October data are also published. The figures indicate that July is a high month for teenage unemployment, but a relatively low month for unemployment of 20- to 24-year-olds. Students may graduate from school in Great Britain after the autumn, spring, or summer terms. Most now leave in July, however.

No adjustments could be made for the differences in reference periods discussed above. Where less than annual average data must be used, this point should be kept in mind when analyzing the youth unemployment data across countries.

In all of the labor force surveys studied here, the general reference period is a week. For jobseeking activities by unemployed persons, however, the reference period has been expanded beyond 1 week in the surveys of some countries. In the United States, Canada, and Australia, a person is counted as unemployed if he sought work within the 4 weeks including the reference week. In Sweden, a 60-day period for jobseeking is allowed.

In several of the surveys, the allowable period for jobseeking activities is ambiguous.[20] In France, Germany, Great Britain, and Italy the survey questionnaire does not specify a jobseeking period. Thus, some respondents may interpret it to be the reference week of

[18] From 1960 through 1966, October surveys were conducted in the even-numbered years and March surveys in the odd-numbered years, but in no year were surveys conducted both in March and October until 1977.

[19] Some summer vacation workseeking is included in the French and German surveys, prior to adjustment to U.S. concepts, because both surveys include students seeking work in the spring (who are not currently available for work until the vacation period) in the unemployment count. These persons are eliminated when the data are adjusted to U.S. concepts. To leave them in would overstate French and German youth unemployment because many of them do find work by the time they become available to begin work.

[20] Prior to 1967, the U.S. survey questionnaire also did not specify a time period for jobseeking.

the survey and others may consider it to be a longer period. France, Italy, and Great Britain do have supplementary questions which clearly specify a jobseeking period, but the responses to these questions do not affect the classification of a person as unemployed. The data for these three countries have been adjusted to the 4-week period used in the United States. The German data could not be adjusted as no information is collected on time of last job search. Also, no adjustment could be made for the more lengthy period allowed for jobseeking activities in Sweden. The longer period undoubtedly results in some upward bias in the Swedish unemployment data when compared with U.S. figures. Thus, there could be some "discouraged workers" in the unemployment figures for Sweden and Germany.

In Japan, the reference period for jobseeking is clearly specified as the reference week. However, according to the instructions on the survey form, persons awaiting the results of previous job applications are to list themselves as unemployed. This practice, in effect, widens the allowable jobseeking period to a time in the recent past which can be longer than the reference week.

Discontinuities in the data

All of the countries covered here have made revisions in their surveys at one or more times during the 1960–79 period. Often revisions have not had much impact overall, but may have had a more significant impact on the data for young people. For example, in 1967, following the recommendations of the President's Committee to Appraise Employment and Unemployment Statistics, U.S. definitions were changed in several ways. The lower age limit was raised from 14 to 16, a test of current availability was added to the survey, and a 4-week jobseeking period for unemployed persons was specified. As a result, unemployment of teenagers averaged 1 full percentage point less in the new survey, mainly because of the availability test. No attempt was made by BLS to adjust the data for prior years, except that 14- and 15-year-olds were excluded from the earlier data. Therefore, the data shown in this article for 1960 may overstate U.S. youth unemployment slightly in comparison with the data for later years.

Changes similar to those made in the United States in 1967 were made in Canada and Australia in 1976. Both countries added availability tests and 4-week jobseeking periods to their surveys. In addition, Canada raised its lower age limit from 14 to 15. As in the United States, the Canadian changes had little effect on aggregate unemployment rates but lowered the teenage unemployment rate, by less than 1 percentage point, however. In Australia, the effect was negligible both for overall and youth jobless rates.

Canadian statistical authorities have revised their data back to 1966 on the new basis. For 1960, BLS has adjusted the data to exclude 14-year-olds. However, adjustments for the other changes have not been made. Therefore, the Canadian data for 1960 may also overstate youth unemployment to a small degree compared with the post–1975 data.

Recently, Australia has revised data from the 1967 through 1977 surveys based on revised population estimates derived from the 1971 and 1976 population censuses. At the same time, revisions were also made to take into account the aforementioned changes in the survey questionnaire. The revisions resulted in higher unemployment rates. For example, the 1977 overall rate of 5.2 percent was revised to 5.6 percent. The teenage rate was increased from 16.0 to 17.4 percent; the young adult's rate was raised from 7.3 to 7.5 percent. Similar revisions have not been made to the 1964 data in this article. Therefore, they probably understate Australian youth unemployment somewhat.

A further source of discontinuity in the Australian data was the institution of a monthly survey in February 1978. In the "Reference Periods" section, it was shown that the effect of the conversion from a quarterly to a monthly survey was very small.

France has made a number of changes in its labor force surveys over the years which have resulted in serious problems for time series analysis. The most significant break occurred in March 1968 when a new sampling method was adopted, permitting a more complete enumeration of persons living in "marginal" lodgings such as rooming houses. It was found that the surveys taken prior to 1968 underestimated the total population, labor force, and unemployment. Youth employment and unemployment were especially underenumerated. French statisticians have not provided a link between the old and new series of surveys, and BLS has not made an attempt to link them because of the lack of relevant data. Therefore, the French data for the early 1960's on youth unemployment are understated in relation to the post–1967 data.

Further, French data since 1975 have been published on the basis of ILO definitions. Prior to 1975, BLS had to make many adjustments to the French data in order to arrive at U.S. definitions. Therefore, there may be some discontinuity between the pre–1975 and 1975–onward French data.

Germany has also made changes over the years in survey questionnaires and enumerator instructions, although not in definitions.[21] Most of these changes were made in the 1960's and early 1970's when German unemployment rates, even for youth, were extremely low.

[21] For a detailed description of many of these changes, see Carol Jusenius and Burkhard von Rabenau, *International Comparisons of Unemployment and Underutilized Labor: The Case of the United States and the Federal Republic of Germany* (Washington, German Marshall Fund, 1978).

Any time series discrepancies resulting from these changes would not alter this fact.

British General Household Surveys (GHS) which provide labor force data have been available since 1971. They are conducted monthly, but published only on an annual basis because the monthly sample is very small. The only data prior to 1971 shown in this article are derived from the 1961 population census, taken in April. Figures from the census were adjusted to U.S. concepts, as were the GHS data. However, since two different sources were used and the timing is different (annual versus April), there is likely to be some discontinuity between the census and survey data.

The only discontinuity in the Swedish survey is related to the fact that it was converted from a quarterly to a monthly basis in January 1970. As shown in the section on "Reference Periods," this does not constitute a significant break in the series. No adjustments have been made on this account.

Japan revised its survey design and enumeration method in September 1967. The major data items, including unemployment and labor force by age and sex, have been revised back to 1953 by Japanese authorities. Thus, there is apparently no problem of data discontinuity.

The Italian data, as mentioned earlier, could not be adjusted to U.S. concepts. One of the problems involved is the fact that a major revision was made in the survey in 1977. A more detailed description of the Italian data problems follows.

Data for Italy

Because Italy has had a severe and unique youth unemployment problem for many years, it was decided that data for this country should be discussed in this article, even though the data could not be adjusted to U.S. concepts. The unadjusted statistics are roughly suggestive of the dimensions of Italy's youth unemployment problem, but they need to be interpreted with some caution.

In January 1977, a more probing style of questioning was incorporated into the Italian labor force survey. The results indicated that (1) many persons who were looking for work were previously enumerated as not in the labor force; and (2) many of these persons, as well as some people previously classified as unemployed, had not taken any active steps to find work in the past 30 days. Italian statistical authorities have made estimates on the new basis for the years before 1977, but breakdowns are not available by age. Futhermore, there are no data by age on the persons who did not seek work in the past 30 days.[22] Such persons should be excluded from the Italian unemployed for comparability with U.S. concepts. The Italian data shown here relate solely to persons who initially respond in the survey that they are unemployed. Thus, all other persons who respond to a later probing question that they were also seeking work, are excluded. Based on data from the 1977–79 surveys, a large percentage (about two-thirds) of those unemployed persons who did not initially respond as such should be excluded because they took no recent active steps to find work. A much smaller proportion (around one-third) of those initially responding that they were unemployed did not take active steps to find work in the last 30 days.[23]

In the aggregate, the problems with the Italian data tend to cancel each other to some extent. The number of inactive jobseekers who should be excluded amounts to somewhat more than the number of persons seeking work who should be included. However, since these data are not available by age, it is impossible to determine the exact impact on youth unemployment rates. The Italian data for 1977 and 1978 overestimate total unemployment by about 200,000. In 1978, the overall rate adjusted to U.S. concepts is 3.7 percent, whereas the rate shown on table 1 is 5 percent. Youth unemployment rates for Italy would probably be a few percentage points lower if it were possible to adjust them fully to a U.S. basis, but they would still be extremely high by international standards.

Conclusion

BLS believes that the adjusted data described in this bulletin, although not perfectly comparable, provide a reasonable basis for international comparisons. They are all based on labor force surveys (except for some supplemental registration data shown for Great Britain). Thus, there is a common base in statistical method. Lower age limits have been adjusted to the age at which compulsory schooling ends so that the data for all countries relate to persons who are free to enter the labor market on a full-time basis, although these ages may vary from country to country. Adjustments have been made, where necessary, to exclude from the labor force career military personnel and unpaid family workers working less than 15 hours, for greater conformity with U.S. definitions. Adjustments have also been made, where possible, to exclude persons from the unemployed who are not currently available to begin work, an important point in youth unemployment comparisons.

Although variations in national traditions for combining work and education have an impact on the resulting levels of comparative youth jobless rates, differences in the statistical treatment of students have

[22] For more on this problem, see *International Comparisons of Unemployment*, pp. 124–36.

[23] A number of these "inactive" workseekers could be persons who are registered as unemployed but who do not regard their presence on the register as an active step to find work in the past 30 days. BLS is now awaiting some cross-tabulations from the Italian survey which should illuminate this point. If these persons truly are inactive workseekers, they would probably be classified as "discouraged workers" rather than unemployed under U.S. concepts.

only a small impact on strict data comparability. Differences in reference periods for the data remain and should be kept in mind when making intercountry comparisons, particularly with regard to France, Germany, and Great Britain (registrations only) where data do not relate to the full year. It is likely that the spring data for France and Germany are understated in comparisons with the annual average data for the other countries. It is difficult to draw a firm conclusion about the British registrations data for July, which have been shown because they are more up-to-date than British survey data. British registration data generally understate unemployment because they do not include unregistered jobseekers. On the other hand, the July figures are not representative of annual averages for Great Britain because July is a peak month for youth unemployment.

All the countries studied have made revisions in survey methods and/or definitions over the period studied. In several cases, these revisions have not been carried back to all the years shown. In particular, the French data suffer from several data discontinuities, and the data on youth unemployment in France for the early 1960's are understated in relation to later figures.

The Italian data presented some unique problems, and they could not be adjusted to U.S. concepts. On balance, the Italian data tend to overstate youth unemployment by, at most, a few percentage points. Even so, youth unemployment rates in Italy are extremely high compared with most other countries.

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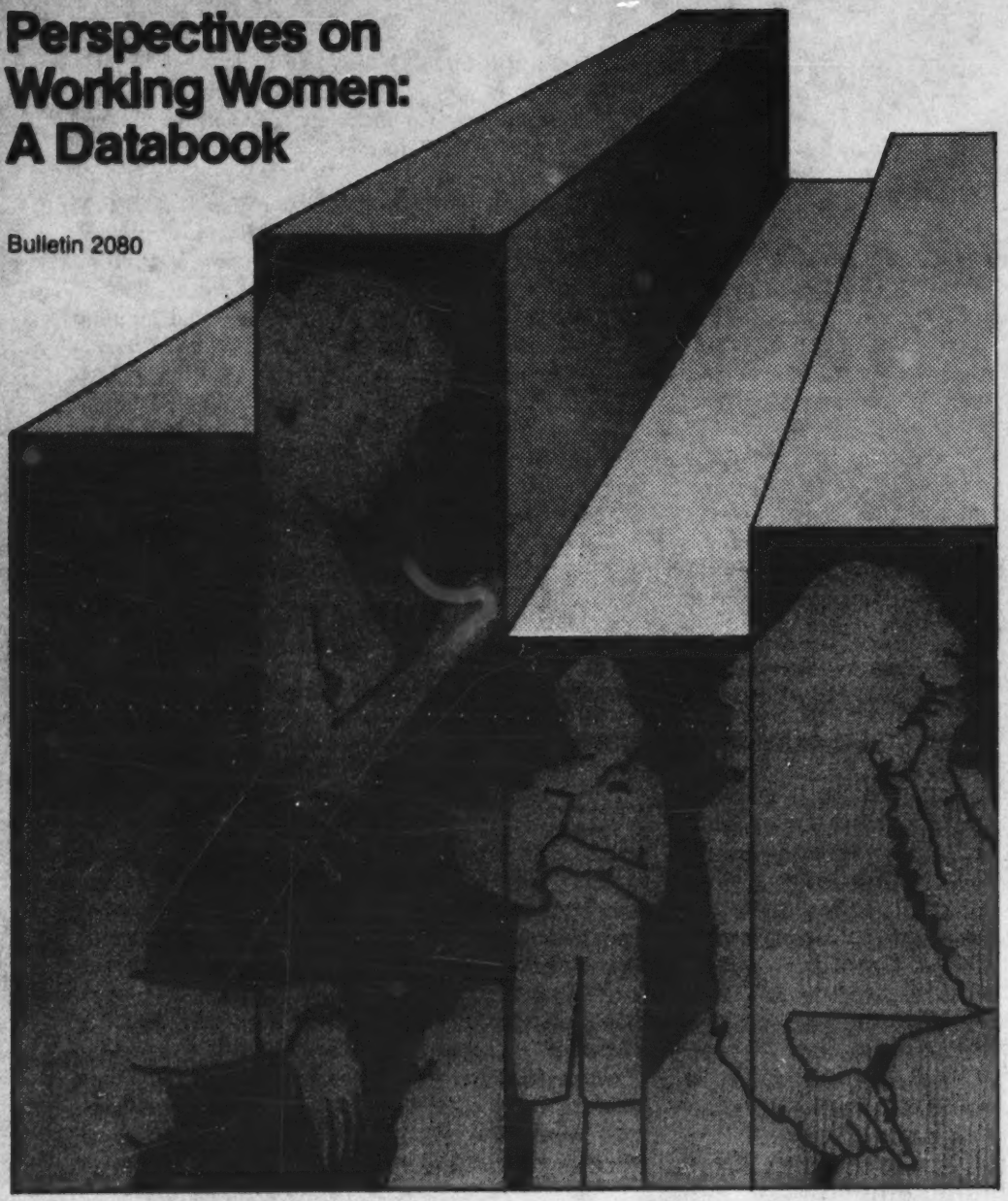

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